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ABSTRACT

The goal of the American Federation of Teachers (AFT) Educational Research and Dissemination Program was to establish a model for disseminating, to classroom teachers, research findings on classroom management and teacher effectiveness. This manual was designed for training local AFT union members: (1) to use the manual in their own teaching situations; and (2) to become trainers of other teachers or Teacher Research Linkers (TRLs). The first section describes program processes and methods of initiating the program in a local union. A general overview is provided of the roles of local leadership, local coordinators, and TRLs. The second section outlines the training process for TRLs and provides activities to develop their roles as disseminators. The section contains planning guides for holding both formal and informal group meetings with teachers and suggestions for working with school administration and local colleges, universities, and research facilities. The third section contains research training activities and interpretations of the meaning and potential application for classroom teachers of statistical data and significant relationships noted in research findings. Activities for both large and small groups are included. The remainder of the manual contains supplemental materials and additional resources. (JD)

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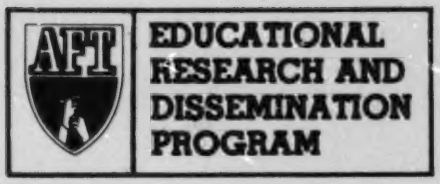

Training and Resource Manual

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PREFACE

EDUCATIONAL RESEARCH AS A RESOURCE: ITS USES AND LIMITS

Over the past decade, educational research has greatly increased its potential as a resource for teachers and others in the front lines of American education. As never before, educational research is a useful and used contribution to the improvement of American education. A key element in this improved situation for researchers and their work is the clear recognition that teachers must be involved in and understand decisions made with regard tc the adaptation or adoption of research findings. Researchers have also significantly increased the sophistication of their studies. Researchers have learned more about the limitations of research findings and the need to clarify their potential uses or abuses.

To be effective, most educational research needs to develop over time and provide knowledge through a program or area of research rather than a single study. The human-intensive nature of education demands that research studies be tried out in various settings in order to increase the validity and reliability of the research findings. Over time, common elements emerge and provide the knowledge base from which educators can devise educational and instructional programs.

Researchers today are working more closely with teachers and other educators to improve both the quality of their inquiries and the resource potential of their findings. Because classroom observation studies have forced researchers to come to grips with the day-to-day issues and concerns of teachers, the quality of research questions has greatly increased. Also, teachers have provided researchers with important insights into the interpretation of research data. Teachers are also playing an active role in some educational research studies (collecting data, reviewing initial findings, and providing a critique of research interpretations). Collaborative research partnerships, involving teachers and researchers have been established in several parts of the country. The "brokering" of research findings (gathering useful information from a variety of studies to be applied to classroom situations) has been successfully implemented in projects like the one developed by the American Federation of Teachers.

The past two decades have taught researchers much about the uses, limitations, and potential abuses of educational research findings. In some cases the potential value of research studies has been exaggerated, leaving disappointed expectations. In other cases, research findings have been applied prematurely to inappropriate settings. Some researchers have fallen into the trap of the "universal expert." All researchers must go beyond their immediate data to provide useful interpretations of their findings; however, when such interpretations reach too far, analysis leaves the realm of research and enters the field of opinion. More and direct collaboration between researchers and teachers will provide guidance for researchers to understand the balance between the uses and limitations of their resources.

Through the collaborative activities of researchers, teachers, and others responsible for educating the nation's learners, we will realize the potential which research holds for the advancement of American education.

David H. Florio
American Educational Research Association

1982 AFT CONVENTION RESOLUTION

EDUCATIONAL RESEARCH AND THE TEACHING PROFESSION

There are many effective style variations among teachers, characterized as the intangible art of teaching. Yet, art alone does not make a teacher. Complementing this must be a very specialized set of skills and professional knowledge base which comprise the science of teaching. Art and science combined make a professional teacher.

Prior to the last decade or two, the primitive level of educational research forced teachers to acquire the greater part of the science of teaching through experiential learning on the job. Today, however, due to significant methodological advances and greater focus on the teaching/learning process in research on education, a reliable body of information exists on effective teaching practice. This is exemplified in work related to cognitive learning styles, classroom management, direct instruction, time-on-task, grouping and sociolinguistic processes. Teachers require a wide array of information and skills to respond appropriately to infinitely variable classroom situations. Research unequivocally portrays the complexity of the teaching process, negating all contentions that "anyone" can teach.

Unfortunately, much of the research on education is confined to shelves in research institutions and libraries. For this reason, new teachers must flounder through the archaic trial and error method of developing effective practice; and experienced teachers know certain techniques work, but cannot always articulate why, thereby feeling unnecessarily insecure in their professionalism.

Another factor isolating research from practice is the lack of opportunity for teachers and researchers to interact on a collegial basis. Existing barriers between school systems and colleges or universities further broaden the distance between teachers and researchers. Teachers, therefore, have minimal input into what will be researched, little access to studies which have been done, limited understanding of the language through which most studies are reported, and few opportunities to comment on their reactions to application of research findings.

Teaching is a profession but can only be considered so when its science is taken as seriously as its art. Research on or related to education, which provides the scientific foundation of the profession, can no longer be viewed as peripheral to the teaching/learning process. Teachers must have access to the information which enables them to know which techniques produce certain cognitive or affective results and why.

RESOLVED, that the American Federation of Teachers will actively promote dissemination of educational research to all prospective and current teachers, including translations of research in a form meaningful to teachers and training resources which enable teachers to relate this information to practical application, and

RESOLVED, that collaborative rela-

tionships be fostered among educational researchers, teacher educators and teachers to promote the professional exchange of knowledge on teaching, and

RESOLVED, that preservice programs in teaching include coursework in basic research techniques and development of inquiry or problem-solving skills, and
RESOLVED, that teachers through the American Federation of Teachers should have much greater input into the setting of research agendas, and
RESOLVED, that publicly-supported educational research projects and the National Institute of Education be held accountable for disseminating findings to teachers, making use of established dissemination channels within the AFT, and
RESOLVED, that the American Federation of Teachers should stay abreast of research findings in education and influence their use in policy decisions related to teaching, in such areas as preservice education, staff development and teacher evaluation, and
RESOLVED, that teachers should be given opportunities to participate in inquiry on practice, update their knowledge of research on teaching and learning, and reflect on the application of various teaching methods and their outcomes, and
RESOLVED, the National Institute of Education be given additional federal funding to continue and expand research on effective teaching and effective schools.

INTRODUCTION

In January, 1981, the American Federation of Teachers Educational Issues Department was awarded a two-year grant from the National Institute of Education to develop a pilot project for the dissemination of educational research findings on classroom management and effective teaching to classroom teachers.

For the most part, teachers perform their professional service in isolation. The basic philosophy of the union movement is to move workers out from under the isolated conditions in which they operate and collectively strive to accomplish goals which benefit all. The teachers' union is the only established institution within American education which sees this as its chief purpose. Therefore, the rationale underlying this project is that the union, with its history of collective activity, teacher advocacy and teacher-trust, can provide a structure through which teachers receive research information in a non-threatening atmosphere and work with their peers, using an inquiry approach, to develop strategies based on the information which helps to enhance the day-to-day process of teaching and learning.

During the two-year grant period, three AFT staff members worked to identify and "**translate**" research on classroom management and effective teaching; select three locals as pilot sites for the project; train local union members to use the research information in their own teaching situations; train these same teachers to become trainers of other teachers; analyze the processes used in each of the three very different pilot sites; and develop an overall Program which could be replicated by other local unions. In addition, staff and the local coordinator initiated collaboration with academic and research institutions in an effort to promote ongoing dialogue between teacher and researcher. It should be pointed out that this was the first dissemination effort of this magnitude ever funded by NIE and is considered unique by that agency and the research community as a whole.

Union Responsibility and Professional Growth

Local union responsibility to its members does not end with negotiations and contract enforcement. If we broaden the concept of "working conditions," we must take into account the professional as well as the economic well-being of our members. This means helping to provide all the resources necessary for quality education within our schools. Many local unions sponsor continuing professional development through teacher centers, educational issues activities, QuEST conferences, etc. Locals actively work with administration to develop curriculum and educational policy. Often, research conducted in classrooms can be successfully carried out only if there is prior approval by both the school administration **and** the local union.

While the reputation of educational research has been tainted by limited samplings and conflicting results, the last decade has produced a significant body of knowledge on the "science of teaching." It is incumbent upon the union to provide this knowledge—its implications and its limitations—to its members and to "watch-dog" its implementation by the administration.

Specifically in reference to the research on classroom management and effective teaching, AFT sees evidence that the day is quickly approaching when teacher performance may be measured against the behaviors which this research deems **more effective**. Although these studies have been validated rather conclusive ly, there is still the possibiiity of misinterpretation by even the most well-intentioned administrator or supervisor.

Educational Research and Dissemination: A New Service to Members

AFT believes that the Educational Research and Dissemination Program can be a useful offering to union members. Not all of your members are on the negotiating team and not all of your members will be involved in the grievance process. But, every one of your members is involved in the daily struggle to do the best they can in the classroom to provide children with an education which will develop each to his/her fullest potential as a literate, functioning adult in a democratic society. We agree with Gary Fenstermacher, who has written, "If teaching is an activity about which we can have knowledge, is it not reasonable to contend that those who teach ought to have what knowledge is available about what it is they do?"[1] We further contend that the union as a viable structure in which to present that knowledge, is obligated to do so.

1. Fenstermacher, Gary D., "On Learning to Teach Effectively from Research on Teacher Effectiveness." In C. Denham and A. Lieberman, eds., **Time to Learn**. NIE, May, 1980.

What is dissemination?

According to the **American College Dictionary**, it means to scatter, as seed; spread abroad or promulgate (declare publicly). This has been the most pronounced form of dissemination in the past: giving out INFORMATION. However, like the seed, information which is to become fruitful also needs to be tended and nurtured, not just thrown to the wind in hopes that it might take root.

The AFT Educational Research and Dissemination Program is more than the public sharing of research information. Our model allows teachers to work with the research, transforming it into a useful tool for everyday classroom teaching and learning. Teachers are brought together with the help and support of their union to investigate the scientific knowledge available on classroom management and effective teaching, to use what is helpful from that body of knowledge, and to give feedback and additional input to those who document that knowledge—the educational researchers. These extra steps the union has taken help not only to bridge the gap that has traditionally existed between research and practice, but also to narrow it so that researchers and teachers can more easily work together toward a true sharing of professional knowledge about teaching.

The model used by the AFT Educational Research and Dissemination Program in its pilot project was a two-level training process. In each site, a group of teachers known as Teacher Research Linkers (TRLs) was chosen tc participate in the project on a continuing basis. After receiving the research information in regularly scheduled training sessions, they were asked to develop strategies for implementation

in their own classrooms and give feedback on the usefulness of the research. At a higher level, they were asked to become **teacher consultants** by sharing the information with other teachers, primarily in their own schools.

The following pages are based on what we have learned about the functioning of this model and tips on what to pursue and what to avoid in successfully offering this Program to your own local union members. The information is generic in nature, but is based on our experiences in three very different pilot sites. In providing this service to your own members, you will have to carefully analyze your own local operation and modify where necessary. We do believe that any local union—large or small; urban, suburban or rural—can implement the Program and be successful in furthering the professional growth of its members.

How to use this manual

The bulk of this training and resource manual is divided into three parts. The first section describes Program process, the nuts and bolts of initiating and maintaining the Program in your local. Here you will find a general overview of the roles of various people involved in the Program: local leadership, the local coordinator, and TRLs. The second section outlines the training process for TRLs and provides activities to help develop their roles as disseminators. There are planning guides for holding both formal and informal group meetings with teachers and suggestions for working with school administration and local colleges, universities and research facilities. Since these sections capture the scope of the Program, THE LOCAL PRESIDENT AND/OR THE LOCAL COORDINATOR NEED TO BE COMPLETELY FAMILIAR WITH THEM.

The third section of the manual contains research **translations** and research training activities. The translations are the result of countless hours of review and synthesis of research studies in each specific area. We must point out that these translations are far from the original research reports. Based on our own knowledge of teaching and classrooms and input from those TRLs in the pilot project, we often took "leaps of faith" in reporting what the findings imply.

In addition to each research translation, there are activities for both large and small groups. Instructions for their use include objectives, time allotment, format and preparation. These activities are designed to promote thought and reflection about what teachers do in their classrooms. Any local coordinator or TRL using these activities will quickly see that there are no "right or wrong" answers. While the research concepts have been proven, how a teacher decides to use the information is a matter of professional style and choice.

While each translation is a separate entity, the order in which they appear in the manual follows a natural progression and we strongly suggest that they be presented in that order, particularly in the training of TRLs and any other on-going study groups.

The remainder of the manual contains supplemental materials and additional resources. Unless otherwise indicated, you are free to duplicate materials for distribution and use.

THE KEY PLAYERS

RESOURCE FOR UNION LEADERSHIP AND LOCAL COORDINATOR

The Local Union Leadership

Union leadership's support for the Program is the most crucial element of success. In each of the three pilot sites union leaders saw the value in providing this kind of service to their members. In some cases it was the first time this type of continuing professional growth was offered; in others, the Program became part of existing opportunities for union members to take advantage of rewarding union-sponsored staff development. The leadership was committed to more than negotiating contracts and handling grievances. They saw this as a way to provide teachers with something really meaningful in terms of their own classrooms and to bring all levels of education—teachers, administrators, universities and researchers—together to assure quality education for the children in those classrooms.

Local union support for the Program does not end with project start-up. Continued support is needed for those who take a more active role in the Program. Space for training sessions needs to be provided along with access to duplicating equipment if necessary. Publicity for the Program should be on-going and participants should be recognized for their efforts. Union leadership may be called on to help establish collaborative ties with central school administration and local universities or federal research labs.

This does not mean that the local president has to assume all the responsibility for implementing the Program. Rather, a local coordinator should be appointed to oversee Program operation, training and follow-through.

The Local Coordinator

In each of the three pilot sites the local coordinator acted as a liaison between the local union leadership, AFT staff and the local TRLs. In working with the sites, we found the coordinators possessed certain qualities and skills which should be considered in identifying someone to perform this job in your own local.

- Time and Commitment—The local coordinator must be able to make good use of time, particularly at the onset of the Program. Chances are, everyone in your local is already overburdened, whether in a leadership, union staff or classroom teacher capacity. In our pilot sites, two of the coordinators were teacher center directors and the third was "teacher-in-charge" of a pilot elementary school. While none had classroom responsibilities, their workdays were often long and hectic. There was a little more flexibility in their schedules than in most teachers', but more importantly they held a belief in the merit of the project and were committed to its success.
- Recognized Leader by the Union—The coordinators had already demonstrated their leadership capabilities to the union. It was known that these people had the ability to work with others to get a job done. Since the union leadership was committed to project success, they recommended candidates for this role.

- Knowledge of the "System"—The local coordinator needs to have information (or know where to get it) about the system: the union structure and the district structure. Coordinators who are in tune with this information can more readily identify potential TRLs and building sites because they know which teachers are good union members and which administrators will be cooperative. They know who to contact in the administration and how to work with them. They are conscious of the sensitivities of all "players" and are able to offer concrete suggestions as to how the Program can best function in the local. They use information to solve problems. When something doesn't go as expected, they are more likely to analyze why rather than abandon a good idea completely.
- Relationship with Local Universities, Federal Labs, etc.—In all three sites we were fortunate to have coordinators who already had established relationships with universities and/or other research facilities. The local coordinator should either have these contacts or be willing to nurture them in order to promote collaboration. If these relationships do not already exist, the union leadership, along with the coordinator, may be involved in initial meetings.
- Experience in Training Adults and Planning—It would be most wise to select a coordinator who has had prior experience in training or acting as a resource for teachers. In addition, he/she should be able to organize sessions, set agendas, facilitate planning meetings, and motivate others working in the Program. It is also helpful if the coordinator can document and evaluate the process as it moves along. If you feel the need for outside funding for the Program, it may be beneficial for the coordinator to have some contacts with local foundations. Although the Program should not need financing, often stipends prove an additional incentive for both teachers and college faculty who become involved. (See: The Research and Academic Community)

The **responsibilities** which follow will be useful in guiding selection of the local coordinator.

RESPONSIBILITIES OF THE COORDINATOR

1. Organize and coordinate all program activities.
2. Develop expertise in educational research.
3. Select and train TRLs; select buildings with approval of local leadership.
4. Act as liaison with central office and building administrators.
5. Act as liaison with universities and federal labs and centers to promote collaboration.
6. Act as resource for TRLs.
7. Organize wider-scale dissemination (QuESTs, workshops, etc.).
8. Conduct periodic evaluation of program.
9. Report to the local president and AFT Educational Issues Department.
10. Take responsibility for PR on Program through local publications.

Once the coordinator has been chosen, the process for selecting TRLs and building sites is the first task to be completed.

The Teacher Research Linker—TRL

In linking research with teachers, the TRL (Teacher Research Linker) is the core of the program. Past research indicates that the human element in innovation and change is crucial. You may be thinking to yourself, "Why don't we just distribute this information?" While that is a form of dissemination, it does not guarantee that teachers will use the information to enhance classroom practice. As a matter of fact, just passing out information is the very practice AFT is hoping to discourage by establishing this Program.

There are two ways to approach the initial selection of TRL candidates for the Program. One is to be TRL specific. That is, identify only people you feel are capable of serving as TRLs. Tell them specifically what it is you expect of them and begin training. Another way to approach selection is to conduct an awareness session on the Program, open to anyone, covering some research content and outlining the TRL program. Then see who expresses an interest. This process may be more time consuming since it involves first doing sessions to hook people, then making a final assessment as to who will function best out of the group as a TRL. Both approaches can be valid. Remember, the more information you have about a person, the better able you will be to judge their functioning effectively as a TRL. If you use a TRL specific identification, it should be because you already have the information you need to make a valid judgement. In the three pilot sites, we used a combination of the two.

Before making a final decision on people, take into consideration the buildings in which prospective TRLs teach. For example, in one site we had a TRL who was excellent at grasping the research concepts and who had had prior experience in presenting in-service workshops to teachers. However, her building was made up of a staff of teachers who hardly talked to one another, let alone worked together. If your goal is to have a group of "free lance" resource people, then you may not have to take into consideration building complexions, but if you want to have the Program really take hold using the building-level dissemination model, you will have to examine the school environment.

Whatever path you choose in selecting TRLs, ideally, all of the people responsible for sharing the information should possess or be able to develop the following skills and characteristics:

CHARACTERISTICS OF EFFECTIVE TRLs

1. Is a Union Member in good standing and displays loyalty to the local.
2. Is viewed as a trusted leader and resource by peers.
3. Has good rapport with the building principal.
4. Operates on a professional level; concerned with his/her own professional growth.
5. Is a risk-taker; innovator; takes initiative.
6. Possesses good interpersonal communication skills; can develop and maintain rapport.
7. Is able to develop alternative solutions to problems and evaluate them.
8. Is viewed as an effective teacher.
9. Has the time available to give to the Program.

10. Can facilitate the functioning of adult groups.
11. Is organized; task-oriented.
12. Exhibits empathy for others and respects individual differences.
13. Can be depended on to follow through.

While your TRLs should have displayed loyalty to and support for the local, usually through active involvement, you must not overload them. This is something only you and the TRL can analyze. In the pilot sites, some TRLs were also building representatives, local officers, teacher center staff, or active on various committees—grievance, educational issues, negotiations, etc. The effective TRL is one who, like the coordinator, can juggle both personal and professional responsibilities, letting you know when time is a problem, but still maintaining commitment. You may consider selecting two TRLs per building to help shoulder responsibilities and provide support for each other in dissemination activities.

The Individual Building

Before discussing the criteria for identifying individual buildings we need to provide you with the rationale for disseminating at the building level.

The overriding reason is that there is a group already assembled on a day-to-day basis. Scheduling of meetings can be coordinated to fit the schedule of only one staff. Meetings can be held within the school day—during lunchtime, common preparation time, or department or grade level meetings—or before and after school if the building is available. Sessions can also be held in conjunction with building union meetings and/or staff meetings, although we caution against the use of meetings in which other business has to be tended to, particularly in the case of mandatory faculty meetings, since the agenda may not be in the TRL's control and these meetings are often viewed by many teachers as negative, time-wasting experiences. Also, since faculty meeting time historically is viewed as **belonging to the administration,** the principal must agree **not** to issue mandates on teacher behavior once the research information has been shared. We must caution, however, that the information is good. As a result, although TRLs had received prior agreement from the principal not to mandate, in some cases, a "gentle" reminder was necessary for over-zealous administrators.

When the staff is cohesive and cooperative, there are already groups of teachers working on mutual problem-solving and "recipe-sharing," i.e., exchanging successful strategies. In other words, there are information-sharing **networks** already established. Tapping into these networks is a good way to promote meaningful dissemination. The interaction that takes place in a session does not have to stop when teachers walk out the door; continued analysis and discussion can occur between sessions—across the lunch table, in the hall, during the weekly bowling league—the opportunities are endless.

Another reason for building dissemination is directly related to the TRL as an "on-site" resource. **Knowledge utilization** research points out that the proximity of the resource affects its use. Stated another way, the closer the resource, the more apt it is to become used. Think about other ways information is given to teachers. Formally, it is shared through journals and other publications, "expert" con-

sultants from outside, or college course work. When the teacher goes to apply that information in the classroom and reaches a stumbling block, neither the author, consultant nor professor are there to help out. The TRL will be there—everyday!

Not only is the proximity of the TRL an important factor, but also the common knowledge he or she shares about the system makes the TRL a credible resource. After all, the TRL has to fulfill the same administrative mandates and deals with the same student population as every other teacher in the building. There is a built-in sensitivity to what working in this building is all about.

A final reason for building dissemination is linked to collaboration with and feedback to the research community (See Research and Academic Community). Ours is a two-way process: not just information-giving, but information-gathering, too. In order to provide the research community with feedback on the usefulness of their research and direction for new areas of study, a network of TRLs linked to a specific group of teachers is necessary. In this way, feedback is solicited from a constant population of teachers who are receiving a continuous flow of research information.

Now, let's focus on choosing building sites. In addition to the TRL there are two other factors to consider: the principal and the staff as a whole.

- Since the training and dissemination program is union-sponsored, it can take place without the principal's "blessing." But, it is much more advantageous to have administrative support. The principal who is opposed to this process, whatever the reason, can kill it. He or she must not be afraid to see the staff grow. The administrator who is in fear that teachers may know more than he or she will be a detriment. Therefore, the principal should at least be kept informed of what is happening. He or she can become a **partner** in the process with the understanding that the sessions are voluntary and mandates on practice are not imposed. If the opposite happens, the Program becomes a threatening, administrative project instead of a teacher-to-teacher problem-solving process.

The local coordinator may want to meet with building principals to explain the purpose and "ground rules" of the Program and how, by working together, the principal, teachers, and, ultimately, students can benefit.

Clearly outline the TRL's role and what will be needed from the principal. Initially, few administrators will balk at the opportunity for staff to grow. However, if the principal feels there is potential for **loss of control** or **planned insurrection**, this may not be the kind of administrative leader whose school is conducive to the ER&D process.

We would like to point out that in the pilot sites, all building principals, except one, were receptive and supportive. In fact, several of them welcomed the assistance of the TRL. They felt with all the other demands on their time, they had not had the opportunity to function fully as an instructional leader for staff.

Some considerations for investigation and negotiation with the principal might be the following:

1. Meeting space and time.
2. Use of duplicating equipment.
3. Access to building by "outsiders."

other TRLs, researchers, etc.
4. Possible release time for TRL.
5. Possible release time or class coverage for participating teachers.
6. Commitment to collaborate with staff on recommended changes which need administrative support.
7. Commitment to keep project voluntary and non-judgemental. The only evaluation is the teacher's self-evaluation.

- The other factor in building selection is the interaction of the teaching staff. Since the long-range goal is to involve as many teachers as possible in the process, the more cohesive and cooperative the staff is, the better. A staff which is divided or competitive will not make the best use of the research and process, if they make use of it at all. This may be the kind of staff you'll want to tackle later, but initially it will be rough going.

Examine the communication networks with the prospective TRL. Do 4th grade teachers communicate only among themselves? At the secondary level, is the school so departmentalized that there's little or no cross-content communication? Is there opportunity during the day for both professional and social exchanges among staff? Are "special" teachers (special ed, bilingual, travelling) integrated into the social structure of the staff?

The number of "innovators" or "risk-takers" among the faculty and the overall level of professionalism will directly relate to the success of the Program. You are asking teachers to become inquirers, investigating the research in terms of their own classrooms. They may be skeptical at first, particularly older teachers who feel their experience has made them seasoned problem-solvers. Skepticism can be more readily overcome if there is an initial group of risk-takers who are willing to experience the Program. Their finding merit in it will help bring other interested teachers together.

Finally, there should be a perceived need for the Program. In the Pilot sites we did not do a formal "needs assessment." Many AFT members request information on classroom management and effective teaching strategies. Since this research is the beginning core of the "science" of teaching and there is already evidence that teachers will be expected to exhibit certain research-based behaviors for evaluation purposes, we felt the need was already well-established. Additionally, the teacher centers in the sites had conducted previous assessments which supported our original assumptions about the usefulness of these research areas. In selecting buildings, you may want to obtain past needs assessments done by a teacher center union, or staff development office.

Please note, however, that even those teachers who were already practicing behaviors deemed "effective" by research, benefitted by being exposed to the technical knowledge. It told them, "You're doing a good job," and they found new ways of working in the classroom so that the **effective** behaviors were even more profitable to the instructional process.

CRITERIA FOR
BUILDING SITE SELECTION

1. Good relationship between principal.
2. Overall support for professional growth by staff and administration.

3. Cohesive and cooperative faculty.
4. Scheduling allows for sessions.
5. Open lines of communication; overlapping of **networks**.
6. Presence of innovators/risk-takers.
7. Program viewed as non-evaluative by principal.
8. Participation in program will be voluntary.
9. TRL is viewed with trust and respect.
10. Perceived need or benefit on the part of participants.

The Research and Academic Community

One of the most significant aspects of the Program is the attempt to collaborate with research and teacher training institutions. Once you have pulled together the union leadership, the coordinator, the TRLs, and individual buildings, the next step in developing a truly on-going process is to **network** with facilities which can provide future research topics for program continuation. The teachers you reach will also generate a lot of feedback on the studies which the research community should receive. Collaboration can provide a significant contribution to the entire process.

Clearly, this is a relationship that will take a lot of nurturing to become productive. Historically, practicing teachers, educational researchers and teacher training institutions have been far apart. They have completely different mind-sets about what their roles are. If a college or university is primarily a teacher training institution, chances are their faculty will know little about the research. If the institution is primarily a research-producer, they may know little about daily life in the classrooms. And if the institution does both . . . this comment by a college dean reacting to a presentation on the project by AFT staff says it best: "If you can get these institutions talking and working with teachers, you've done something tremendous. I can't even get my teaching faculty and research faculty to collaborate!"

Involving the research and the higher education communities is not absolutely necessary, but it will benefit the process in the long run, particularly if there are research topics your members want to investigate beyond classroom management and effective teaching. Unless there is someone in the local who can identify and translate research for you, you will have to go to these sources.

In approaching these institutions you will have to sell them on the Program, providing benefits for their participation. Set up a meeting with the dean of the local school of education, or the director of the research lab or center. Explain the Program and what the union hopes to accomplish. Incentives for collaboration are varied. You'll probably get inquiries from institutions about money or stipends for faculty time to do translations for you. Point out that everyone else is donating time and effort. That's impressive! If money becomes an issue, suggest that you can work together to seek outside funding.

In "selling" the Program stress the intrinsic rewards. Collaboration can lead to entrée into real classrooms. It can also provide a lot of substance for publication. Point out that your teachers can critique research translations or summaries, giving feedback that will help in making them suitable for teacher publications in addition to academic journals. Realize that not all researchers necessarily want to see their research applied. Some are con-

tent just to do it. Underscore the fact that your members can generate a good deal of knowledge about teaching which can be useful to these institutions. TRLs and other teachers can provide suggestions for enhancing pre-service and in-service training, and can give direction to aid future research.

Once you have generated interest, propose the following roles the institution can play in the collaborative effort:

1. Identify useful research for TRLs.
2. Translate or summarize research studies in a language teachers will appreciate. This can be done by faculty or graduate students.
3. Conduct free research seminars or up-dates for TRLs.
4. Work inter-actively with teachers in doing research.
5. Offer graduate or continuing education courses for teachers interested in research.
6. Help seek outside funding should it be necessary.

We can safely predict that the institutions will want some evidence that something is happening. Therefore, it is advisable that you have the process well-underway before approaching them.

For those institutions that wish it, copies of the final report to the National Institute of Education on the pilot project are available through AFT or NIE.

TRAINING FOR DISSEMINATION

RESOURCE FOR LOCAL COORDINATOR

While implementation in the classroom is the first level, dissemination is the second-level function your TRLs will perform. For some it will be anxiety-producing. After all, learning information for use in the classroom is one thing. Learning it for the purpose of sharing with colleagues is another. From the beginning of the Program and throughout you will have to be sensitive to the needs of the TRLs. You will have "stars" in your group; those who can see the benefit of sharing the information almost immediately. They will be chomping at the bit to do so and will feel comfortable in that role. On the other hand, some will feel that they don't want to be viewed by other teachers as "the expert," a prophet in their own land. If they tell teachers, "This is the way to arrange your room," or "Here is how you manage groups," they will be viewed this way. Gently remind them that the information is based on research; let the research be the buffer. TRLs who are more comfortable as disseminators can provide a lot of help and support to the ones who aren't.

Let's take a minute to discuss group process as it relates to the development of these trainers. Ultimately, you want them to work as a group, getting nourishment from each other's successes and offering support in overcoming roadblocks. However, it will take time for TRLs to become socialized into this process. They will get assurance, feedback and good ideas from one another. And the more opportunity you provide the group for planning, sharing of dissemination activities and watching and listening to each other present, the more they will develop their talents individually and collectively. Becoming a disseminator is as much of a growth experience as using the research in the classroom is.

Training information can be interspersed with research information in the same sessions or can be presented in separate sessions. We do suggest that TRLs have at least one research study "under their belts" (this means understanding the concepts, applying it in their own classes and discussing the results of that application) before they begin training other teachers in it. This is because in planning dissemination for, say, **Effective Classroom Management for Beginning the School Year** research, the discussion can center on that knowledge. We'll give you strategies for this discussion later on.

TRLs should be aware of the research on adult learning and how it applies to dissemination. In terms of training information, this may be the first segment you discuss with them.

Planning Dissemination

Once there is a clear understanding of the research information and how adult groups can function, TRLs can begin to plan dissemination activities. This can be done individually or as a group. For example, have TRLs look at a particular study—**Effective Group Management Practices**—and then have them highlight what they feel is the most important information to cover. As a follow-up "assignment," you might ask several TRLs to develop 15 to 20 minute presentations on specific concepts for the next meeting. At that meeting have them

"roleplay" the presentations asking for critiques by other members of the group. If video tape equipment is available, tape them and then go back over each presentation. We found this to be a highly successful way both to judge knowledge of the research and to allow TRLs to practice presenting in a supportive environment. If the TRL is planning on working only with a small (3-5) group, a **formal** presentation may not be necessary. However, somewhere along the line, the union should make use of the TRLs with larger groups where this style may be more appropriate.

In planning these activities it may be useful to take TRLs through the "Suppose That . . ." activity. It is particularly appropriate in helping TRLs plan for dissemination in their own buildings. However, try to encourage TRLs to plan together even though they work in different schools. In one site, TRLs planned and presented a three-part series of workshops in the union's regional offices. They planned as a group, to insure continuity of information in five different settings. In another site, TRLs planned individual building sessions which were all scheduled within a two-week period. This made planning easier. The TRLs reported on their sessions at the next group meeting. The discussion was instrumental in establishing and maintaining their roles as disseminators.

Once TRLs have practiced presenting and planned their dissemination strategies, you should provide them with the situational case studies found at the end of this section. These case studies are based on actual situations AFT staff encountered in doing training. We would **like** to say that all audiences will be receptive to the information and each other and that good planning will insure success. But that's like your college education professors telling you to have good lesson plans and interesting instruction to be successful with children. We know there's more to it than that!

How do you manage a potential conflict in the group? How do you deal with administrative "intruders?"

Of course, these case studies are only representative of situations which may arise, but they do get TRLs thinking about effectively handling "adversarial" conditions.

When actual dissemination is to begin, we suggest having TRLs pair up, when possible. It helps to strengthen confidence. There are "two brains" available to handle questions or situations which may arise. This is a particularly effective presentation strategy for more **formal** group sessions.

PLANNING, ORGANIZING AND CONDUCTING RESEARCH TRAINING SESSIONS

RESOURCE FOR LOCAL COORDINATOR AND TRLS

This section will focus on training for both your group of TRLs and the teachers they eventually train. Since the TRLs are your first priority, we will discuss and outline this process first.

Scheduling and length of sessions for TRLs

Training sessions for TRLs should be scheduled on a consistent basis, e.g., every other Wednesday. The frequency of meetings is flexible, but they should be held at least every three weeks. Survey the prospective TRLs to determine the best day for meetings. In the pilot sites one group preferred Mondays, another Thursdays and initially the third group met on Saturday mornings. Later on, the third group was able to take professional leave days for meetings. Those were held on Fridays.

The length of a session should be adequate to cover the information scheduled, discussion, and planning for implementation. In the pilot project AFT staff initially presented the information primarily in a lecture/activity format. As the group began to "gel," we asked the TRLs to read the summary ahead of time and come to the session prepared to participate more actively. We found that this increased the time available for discussion, problem-solving and strategy development.

Sessions should be **no shorter than two hours.** The length of a session will influence the frequency with which you meet. If you're meeting for only two hours, you should try meeting every two weeks. In the pilot site that used professional leave days, we met once per month. Those sessions were from 9:00 a.m. to 3:00 p.m. with an hour for lunch. In general, the frequency of the meetings should not overburden anyone, but TRLs should have a sense that they are involved in an on-going and important program which meets regularly. They should also have a sense of progress, that they are moving through a body of research at a reasonable pace.

Once the calendar for sessions has been determined, allow it to be modified only in emergency situations. There may be times when not all TRLs can be present. If it's a matter of one or two out of a group of fifteen, run the session with those who are available. Setting a schedule, then changing it, communicates a lack of importance for the Program and is time consuming for the coordinator and creates more work. The local coordinator, after fully explaining the Program and planning a schedule with TRLs, should see that the schedule is followed.

If a session is scheduled to begin at 3:30, TRLs should be advised to get there by 3:15. Start on time. A session scheduled to run two hours, should run two hours. Otherwise, your TRLs will get the impression that the time scheduled is too long. Make productive use of the full time to avoid setting a precedent.

If you have done a TRL specific identification, your first meeting may cover the introduction of the Program—why the union is doing this

and how it is to be accomplished; and the dual role of the TRL. You can focus on the first level of their participation—research application in their own classrooms—but be sure to tell them about the second level—dissemination. AFT Program staff found that many TRLs readily and easily locked into their roles as users or evaluators of research but needed considerable time to fully understand and feel comfortable with their second role—disseminators of research to other teachers. Take time to carefully discuss this aspect and insure the TRLs' acceptance. Otherwise, when the time comes for dissemination, you may get reactions like, "I didn't know I was going to have to do this!" It will damage the group.

If the length of the first session allows, plan a presentation on a research study, either in its entirety or in part. It will give them a sense of what the Program is about, and something to do with the information —develop strategies for use in their own classrooms. If this is the content for the first meeting, plan no less than **three hours.**

An agenda for that first meeting might look like this:

I. Overview of the Program (the why and how) emphasizing the union's support.

45 minutes to 1½ hours (The length of time this takes will depend on how much prior information you have supplied.)

II. Outline of the role of the TRL at both levels. Allow time for discussion here. Sensitivity and trust building occurs when you answer questions about their roles and listen to concerns sincerely.

III. Presentation, discussion and activities related to the first research segment.

For suggested time, see research section

The amount of time will vary based on the number of concepts to be covered, whether or not the group has read over the summary, how **socialized** the group is. Encourage discussion of the concepts and how they might be applied. If the discussion is extremely good, you may not need to do an activity. However, activities are available to help stimulate thinking and discussion. Use your own sense of audience to determine when to wind down presentation and discussion and begin an activity.

About 45 minutes	IV. Selection of concepts and planning strategies using the RESEARCH ACTION PLAN.* Describe how the form is to be used and "walk" participants through completing it. Allow time for sharing intended strategies.
	V. Reminder of next session date.

*Directions for using these forms follow this section.

Subsequent research sessions should follow this standard format.

10 to 15 minutes	I. Gathering feedback using the REACTION TO RESEARCH form.* Give participants time to fill out the form using their RESEARCH ACTION PLAN as a reference. This not only helps to identify change, but also provides a storehouse of information to feed back to researchers.
20 minutes	Open discussion and sharing.
See research section.	II. Presentation, discussion and activities related to new research concepts. (Same as above)
30 minutes	III. Planning for application of new concepts and strategies. (Same as above)

*Directions for using these forms follow this section.

TO THE LOCAL COORDINATOR

When TRLs are ready to begin disseminating to other teachers, time will also need to be devoted to TRAINING FOR DISSEMINATION and planning which is discussed in the next section of this manual.

TO THE TRLs

The process you follow in training other teachers in the research will be similar to the process you've gone through, but without the training component. Your first meeting with teachers—beyond a general awareness session—should include some stage-setting.

10 to 15 minutes

I. An overview of the Program.

Explain why the union has chosen to offer this service to teachers.

Clearly outline the investigative nature of the Program. The information is there for teachers to use as they see fit.

Set forth the ground rules for the sessions/meetings. Value judgements about teachers' practices are **taboo**. Teachers are there to work together and learn from each other as well as the research.

II. Conduct the first research presentation and discussion, then follow the same format outlined previously.

Other Considerations

Once you have determined the content of the session, materials you will be using need to be organized. If you are using manual materials, feel free to duplicate any or all of them. Activities, supplemental materials, ACTION PLANS should be set to go and at hand. Any equipment should be ready and the room arranged for the session.

We need to comment on refreshments and/or meals. It is a courtesy to provide at least coffee, tea, and/or soft drinks at a session. Since the Program is designed not to impact on the local's budget, here are several suggestions for taking care of refreshments.

1. Check the budget for "meeting expense" monies which can be tapped.
2. Have TRLs take turns providing a snack—fruit, cheese and crackers, donuts. (Note: the first session should provide something, then you can have the turn-taking.)
3. In doing an all day session, potluck lunches are a real treat.

You are asking people to donate their time and effort. Providing refreshments offers a reward for that and fosters congeniality in the group. Locals who have always paid members for contributing time, will have to plan accordingly.

USING THE RESEARCH ACTION PLAN REACTION TO RESEARCH FORMS

Using these forms is not mandatory, but we found in the pilot project that teachers going back through a year's supply of these were more aware of how useful the information had been and the subtle changes they had experienced. In addition, we were able to use the information to help clarify what could be addressed by research and what couldn't. The information you gather will be of great help in working with the research and college communities when the time comes. These forms can be duplicated as one sheet; ACTION PLAN on one side REACTION TO RESEARCH on the other.

RESEARCH ACTION PLAN

The RESEARCH ACTION PLAN should be used only after the presentation and discussion of research concepts. The block in the upper right hand corner may be used to fill in the specific concepts covered in that session (With-it-ness and Overlapping; Smoothness and Momentum). You may either do this ahead of time before duplicating the forms, or have participants fill them in. Participants do not need to identify themselves unless you are going to be consulting with them individually and will need a copy for yourself. THESE ARE CONFIDENTIAL and are for self or mutual-analysis only.

Chances are there will be teachers who are already applying the concepts. The first section allows them to identify the strategies they are presently using.

The second and third sections ask teachers to identify a concept or concepts they would like to apply and the strategies they will use. Try to get specific strategies down. "To make my praise more meaningful" is hardly specific and will be difficult to evaluate. If teachers are having a tough time clarifying problems or solutions take them through the decision-making steps found under "Self-Direction" in the TRAINING FOR DISSEMINATION section of the manual.

Once each participant seems satisfied with his or her PLAN, charge them with carrying it out until the next meeting.

REACTION TO RESEARCH

At the beginning of the next session set aside time for teachers to report on the usefulness of the information. Here is where you'll get some really good feedback! Let the participants fill out the form at the session. Our days are already filled with untold paperwork and seldom is time available to reflect on what's going on in our classrooms. If you ask teachers to complete the form ahead of time, there's a slim chance you'll get any response. They will want to talk about their successes (and their concerns). Allot time for follow-up discussions before introducing anything new. Above all, let the group interact with each other. It makes your job as a trainer so much easier if the group can help with the problem-solving.

RESEARCH ACTION PLAN

NAME/ID _____

DATE _____

LOCAL _____

RESEARCH CONCEPTS PRESENTED

1. Of the research concepts presented today, which of them are you already using and how?

CONCEPT	CLASSROOM STRATEGY

2. Identify one or two research concepts you'd like to try in your classroom and what you hope will happen.

3. Tell what you will do or change in your classroom strategies to make this happen. Tell when and with what group or class you will try your strategy.

CONCEPT AND EXPECTATIONS	CLASSROOM STRATEGY
	WHEN/GROUP:
	WHEN/GROUP:

REACTION TO RESEARCH

Now that you have had the chance to use the research in your classroom, comment on how well it worked for you. If you feel the research/strategies worked, what change did you notice? Did what you want to happen, happen? If the research didn't seem to work, what do you think was the problem?

CONCEPT/STRATEGY TRIED	REACTION TO RESEARCH

Which of the research concepts do you plan to continue working on? What would you do differently to apply the research, if anything?

CONCEPTS TO CONTINUE	NEW CLASSROOM STRATEGY

ON TEACHING ADULTS

RESOURCE FOR LOCAL COORDINATOR AND TRLs

Adults do not learn in the same way children learn. Therefore, we cannot "teach" them in the same manner. As a "teacher of teachers" there are several key factors one must consider:

1. In adult education the curriculum is built around the student's needs and interests.
2. Adult orientation to learning is based on life situations, rather than subjects.
3. Analysis of experience should be the core methodology of adult education since experience is the richest frame of reference for adult learning.
4. Self-direction is a crucial need of adults; therefore the "teacher" should engage in a **mutual** process of inquiry and problem solving rather than a transmission of knowledge or evaluation of conformity to that knowledge.
5. The older the population, the wider the range of experiences and consequently the greater the variety of individual differences. Adult education must provide for these differences in style, values, time, place and pace of learning.[1]

The teaching of adults differs from the teaching of children in that it is a **process** model. The **content** model normally used with children is one where someone (teacher, curriculum committee, administration, text-book publisher) decides beforehand what knowledge or skill needs to be "learned," puts this body of knowledge into some logical sequence of units, and selects the means of presentation (lecture, readings, labs, etc.).

The **process** model is one where someone (consultant, facilitator) prepares a set of procedures designed to provide learners with procedures and resources to help them acquire information and skills as opposed to transmitting information and skills.

Figure 1 indicates the basic contrasts in assumptions concerning the teaching of children and adults.

FIGURE I

ASSUMPTIONS

	CHILDREN	ADULTS
LEARNER'S SELF-CONCEPT	Dependent	Independent, Self-directed
LEARNER'S EXPERIENCE	Inconsequential	Rich resource for learning
LEARNER'S READINESS	Based on physical, mental social development	Based on need
TIME	Later application	Immediate application
"CURRICULUM"	Subject-centered	Problem-centered

[1]Lindeman, Eduard C., **The Meaning of Adult Education,** (New York: New Republic) 1926.

MODEL DESIGN		
ENVIRONMENT	Authority-oriented Formal Competitive	Mutual Collaborative Respective Informal
PLANNING	By teacher	System for mutual planning
DETERMINATION OF NEEDS	By teacher	Mutual and self-diagnosis
DESIGN OF OBJECTIVES	By teacher	Mutual decision
"LESSON" DESIGN	Sequenced in terms of subject matter Content focus	Sequenced in terms of need Problem focus
ACTIVITIES	"Transmittal techniques"	Experiential techniques (mutual inquiry)
EVALUATION	By teacher	Mutual

Adapted from **The Adult Learner: A Neglected Species** by Malcolm Knowles

Experience and Self

Children will often define themselves in terms of external factors—mother, father, siblings. As we develop and go through our own life experiences, we define ourselves in terms of our own personal experience. Experience becomes self. When the experiences of adults are "devalued" or "criticized," it is viewed by those adults as an **attack on the self.** Therefore, any work with adults should allow time for sharing of experience and respect for drawing on it as a resource.

You will get a lot of sharing of teachers' experiences and strategies if you are successful. Some of these experiences will contradict the research and/or the practices of other teachers in the group. You must, therefore, create an environment that respects each teacher as a person and values their input. One strategy the AFT staff found particularly useful when this situation arose was to focus the group on the **intent** of the strategy. Allow the teacher who offers a statement to verbally analyze why he or she does this. What is he/she hoping to accomplish? Ask the rest of the group for their suggestions on how to achieve the same outcome.

Without putting that teacher on the spot, you may get him or her to re-evaluate the practice with input from the discussion. (This re-focus on intent is also helpful in dealing with a research study which seems to conflict with prior studies or beliefs. What is the research question?) Never allow the group to "gang up" on another member of the group and openly criticize other's practices. Remind them that we all have different styles and determining absolutes is not what this project is about.

Self-Direction

Adults want to be recognized by others as self-directed and non-dependent. Therefore, any planning,

goal-setting, etc., should come at the very least out of mutual decision-making rather than decision-making exclusively by the "expert."

When the time comes to have teachers develop strategies for implementation in the classroom, the TRL's role is that of facilitator, unless specifically asked to do otherwise by the teacher. The Research Action Plan will aid teachers in making their own decisions about what to implement and how to go about it. The TRL can use the following format as a "clarifier" in the problem-solving/decision-making process. Ask the teacher:

1. "What do you want?" Identify needs, concerns and/or problems clearly. Note that they may respond with what they **don't** want. Try to get them to express goals in positive terms; which are much easier to achieve and evaluate.
2. "How can you get it?" Identify possible alternatives. You may need to probe by asking "Are these the only alternatives? Is there another way you can achieve the same outcome?"
3. "Is it teacher-controllable?" Does the alternative need external support to be implemented, e.g., administrative or parental approval? "Does it fit your belief system?" Is the alternative counter to teacher style and beliefs about teaching and learning?
   "Does the action clearly match your intention(s)?" Does this alternative maintain the integrity of the overall classroom process? These are possible criteria for judging the potential effectiveness of an alternative. If the answer is "yes" to all three, then take the next step.
4. Try out the alternative as a possible solution.
5. "Did you get what you wanted?" Refer to Number 1 to evaluate the effectiveness of the strategy.
6. Start again.

In terms of evaluating the potential usefulness or effectiveness of a strategy, another possible question is "How will you know when you get what you want?" While rather simplistic, the step of recognizing a desired outcome is often overlooked in the decision-making process. Determining how you will know when a strategy is successful ahead of time, makes the evaluation of it much easier.

Readiness

While it is assumed that the "readiness for learning" on the part of adults is based on need, there are ways to nurture this readiness through examples of more effective performance, introspection and self-diagnosis, higher levels of achievement or advancement. (An excellent example is additional college course work for certification or financial advancement.)

You will have "master" teachers who will intially see no need to go through the process. Most of those we worked with were experienced teachers with years of service. One of the ways the research was helpful to these teachers was that it validated the good things they were doing in the classroom. In black and white, they were given a "pat on the back" for a job well-done. Those "pats" are few and far between in our profession. They found that they could benefit from working with the information, and in fact, many of them did make useful changes in their practice.

Need can be created. One of the opening remarks we would make to teachers receiving the information for the first time is "How many of you can say, honestly, that your classrooms are running as smoothly as you'd like?" Most of the time, few hands are raised. Of course, you may have to do some contingency planning in the event that you get an overwhelming positive response to the question. One of our project TRLs offered this response as a suggestion: "Terrific! You're probably doing a lot of the same things research says effective teachers do. Let's see," and go from there.

The initial steps in getting people involved in looking at research are your biggest hurdle. Presented sincerely and with enthusiasm, these research concepts will continue to generate interest and feedback from most teachers.

The TRL should refer to "Tips to Presenters" for additional motivation-builders.

Application of New Knowledge

Opportunities for application of new knowledge or skills by most children are normally postponed until some future time—elementary for junior high school, junior high school for senior high school; senior high school for college and/or the work force.

For adults, the application of new knowledge or skills is immediate. The concept in teacher in-servicing that teachers want to be given something to use "Monday morning" is not, therefore, limited to teachers. It is a basic assumption in theories of adult learning. As a result, any training should generate concrete how-to's which can be immediately applied.

The purpose of the RESEARCH ACTION PLAN is twofold. One, it does take teachers through a step-by-step decision-making process. Two, teachers will leave with something useful. By reinforcing the use of this type of plan to guide discussion in future meetings, you are also underscoring the importance of the teacher's involvement in the Program which takes us full-circle back to **Experience and Self.**

Environment

In selecting a specific location for **formal** training sessions there are several things to keep in mind. One, obviously, is providing a pleasant, relaxing atmosphere which stimulates the group's creative problem-solving skills.

Room arrangement should be supportive of adult learning models. Conference style arrangements facilitate two goals. First, having participants seated around a large table promotes cooperation and collaboration and encourages discussion. Second, the TRL is a part of the group, rather than an authority figure. This enhances the concept of mutual planning and decision-making.

At the end of this section you will find a variety of room arrangements for working with groups. There may be times when you want a more structured group with you as the identified leader. For example, a faculty meeting at which you are doing an awareness session might be held using a classroom format. However, if you wish a session to be more interactive, the room arrangement should reflect that format.

Summary

In working with adults, adult learning theories suggest these elements for your consideration:

1. Motivation is based on need.

2. Needs determine "curriculum."
3. Learners' experiences must be tapped as a resource.
4. Programs must foster self-diagnosis and self-direction.
5. Focus is on mutual inquiry and problem-solving and self-evaluation.

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SITUATIONAL CASE STUDY

RESOURCE FOR LOCAL COORDINATOR AND TRLS

During your first awareness session with teachers in your building, you describe the project as a unique teacher-to-teacher staff development process where you will be bringing them research findings on classroom management and teaching effectiveness. They can examine the findings for their usefulness in their classrooms. After you finish your short introduction, a hand goes up. (Fantastic! Someone's interested.) You call on the teacher. (Crash!) She sermonizes, "In the first place, I don't think I need any research information on how to teach better. I'm already a good teacher. And secondly, what's so good about research? We get an awful lot of so-called research stuff thrown at us, telling us how to teach and most of it isn't any good. And no wonder, what do researchers know about my classroom . . . they're researchers not teachers. What's so good about your research?"

How can you respond to this teacher to neutralize the negative feelings toward research that she's expressed? What might you say to indicate that this research and the sharing process have relevance not just for this teacher but all the teachers in the room?

SITUATIONAL CASE STUDY

RESOURCE FOR LOCAL COORDINATOR AND TRLS

Today, you are leading a discussion on establishing, teaching and maintaining classroom instructional procedures and behavioral rules with a group of teachers in your building. In the course of your discussion on the importance of providing feedback to students about how well they are performing, a fifth grade teacher in your group volunteers the following practice. To reinforce her rule about students being quiet and continuing their work whenever she leaves the room for a period of time, she always singles out the couple of students who are quietly working when she does return to the room and praises them for their good behavior even though a significant number of students are engaged in noisy chatter. She might say, "I really like the way John, Susan, Michael and Linda are quietly working. That's how we're supposed to behave whenever I leave the room." She feels this kind of positive feedback given publicly to the behaving students will influence the rest of the students to behave properly.

It's apparent to you that this teacher is still using this type of vicarious praise long after her students should have learned her rule governing their behavior when she leaves the room. Knowing Brophy's research on teacher praise and how this specific use of praise is generally ineffective for desisting student misbehavior and often only embarasses the behaving students, how might you handle this situation? What can you say or do to help this teacher see her practice is one that the research says is ineffective and that there are more effective ways to handle this situation for both the behaving and misbehaving students?

SITUATIONAL CASE STUDY

RESOURCE FOR LOCAL COORDINATOR AND TRLS

Today's group session with the teachers in your building focuses on the first half of the Kounin research on group management. You make the point that good transitions between activities are essential to maintaining smoothness and momentum within a lesson and throughout the day. You also link this concept to the Evertson research, highlighting the necessity for having good procedures for transitions between activities. You then ask the group to share their transition strategies. After hearing several good strategies, the next teacher comments that she tells her students to put away their materials and get out the workbooks for the next lesson. Her students know that she gives them exactly two minutes and no more to get ready for the next lesson, and then she starts regardless of who may or may not be ready. She adds that two minutes is plenty of time and that it's their responsibility to be ready when she is. A few murmurs rumble through the group. One teacher responds, "Well, how do you make sure the kids who aren't ready get your instructions for the first lesson? Don't they miss out?"

You personally don't agree with this practice and it's clear from the general buzz and show of hands that the majority of teachers don't agree with this practice either. As the group leader, what feedback can you provide to this teacher? How can you channel the other teachers' comments so that this teacher doesn't feel her strategy is being openly criticized by her peers? What might help teachers understand that the outcomes of their teaching practices may be inconsistent or in conflict with their intended instructional and behavioral goals?

SITUATIONAL CASE STUDY

RESOURCE FOR LOCAL COORDINATOR AND TRLS

Your group sessions on educational research are going well! Your principal sat in on the first session and complimented you on your presentation on classroom management and your leadership. The teachers were really interested in the ideas you shared and actively participated in the discussion. Your third session starts in eight minutes and ten teachers have come to the meeting. Suddenly, in walks the principal and the district staff-development officer. They both take a seat in the back of the room. (Moan . . . Oh no, who invited her? What's she doing here? Why didn't my principal say anything about this to me?) The show must go on.

How might you handle this situation? What might you do if you were conducting the session on the principal's staff meeting time or on your personal time after school? How does having the principal attend the first session or any other session affect you and your presentation or your discussions with participating teachers?

SITUATIONAL CASE STUDY

RESOURCE FOR LOCAL COORDINATOR AND TRLS

After a terrific in-service day presentation on rules procedures and consequences, the principal congratulates you on your efforts and states that more of these meetings would be helpful. You've met with her to discuss the Program, emphasizing the non-evaluative, voluntary nature of it. But, before the end of the day, she gets on the PA and gives the following announcement: "The presentation by Mr. Jones this morning was excellent. I'm sure we all learned something. On Monday, I expect all of you to turn in to my office your hierarchy of consequences for dealing with inappropriate student behavior. Have a good weekend!"

The principal has violated the voluntary, self-evaluative nature of the program. The teachers are grumbling and their hostility is aimed at you. How can you "re-group" and rectify the situation?

SUPPOSE THAT . . .

RESOURCE FOR LOCAL COORDINATOR AND TRLS

. . . you have been asked to spread the good word about the educational research information given you through the AFT ER&D Program.

I. What kind of arrangements would you have to make within your building to get a session "off the ground?"
   A. Get administrative support ____

   B. Determine meeting space ____
      What are your options?

   C. Determine specific time ____
      What are your options?
      Before school ____
      Over lunch ____
      After school ____
      Release time ____
      Other ____

II. What kind of administrative support would you need?
   A. Permission for meeting ____
   B. Arranging release time ____
   C. Will need meeting to discuss a workshop ____

III. Describe how you see the initial meeting with your building principal.

IV. You would need to spark interest in your workshop. What would you do to motivate your building's teachers to attend and get involved?

V. Who would you invite to this exceptional workshop?
   A. All teachers ____

   B. A specific grade level or department ____

   C. Another select group ____

VI. If you were going to invite a specific or select group, write down the names of those you would invite.

VII. Of the research presented to you so far, which do you feel you would be comfortable with in presenting to other teachers?

VIII. Which concepts would you want to cover in your workshop?

IX. What additional help would you need?
A. Union building rep ____
B. Another TRL ____
C. Local Coordinator ____
D. Other ____

X. On the back of this paper, design a flyer (to be dittoed) advertising the session.

TIPS TO PRESENTERS OF AFT ER&D MATERIALS

RESOURCE FOR LOCAL COORDINATOR AND TRLS

Individual style, diversity, ecclecticism, locus of control, area of strength, professional judgement are terms often given "lip-service" in conversations about teachers, but seldom backed-up by credible actions! Teachers are constantly confronted with mandates from administrators who expect them to joyfully and proficiently implement programs in which teachers have had little or no input, received little or no training and, consequently, to which they give very marginal commitment.

Since it is generally acknowledged that much still needs to be done to enhance the pre-service training aspect of the teaching profession, **it is essential that in-service or retraining efforts be beneficial to practicing teachers.** This may be easier said than done.

Recent findings in adult learning theory have been great clarifiers. We now understand that adults learn best when the information presented to them is couched within their situational or experiential base. In our efforts to share research-based strategies with teachers through the AFT Educational Research and Dissemination Program, presenters should be mindful of the following information as related to the ER&D project and should incorporate the following concepts in their training sessions:

SOME THINGS TO SAY ABOUT THE PROJECT AND THE RESEARCH IN INTRODUCTION SESSIONS

***These items may have to be repeated at subsequent sessions**

- This project, designed to connect teachers with a body of knowledge in educational research, was conceived by the Educational Issues Department of the American Federation of Teachers, and received its initial funding from the National Institute of Education.
- It behooves us as members of the teaching profession to investigate and utilize appropriate information from our educational research base. This can serve as an important tool in helping to restore public trust in education and in re-establishing teaching as a profession.
- This project fully respects the rights of teachers and supports the concept of teacher participation on a voluntary basis.
- The teacher union as a peer-interest group is most effective as a research dissemination agent because it operates in a non-threatening, non-judgemental atmosphere. While it is important to seek the support of school administrators for those who are working with the program, we must insure that the voluntary, non-evaluative aspects of the program are maintained.
- The dissemination model is a teacher-to-teacher problem-solving process. This approach has also been successful with Teacher Center programs. Research has shown that often teachers go to their colleagues when they need help.
- Since the conduit for dissemination is the teacher union, project personnel have received honest feedback as to teachers' needs, con-

cerns and agreements. This is very valuable information in validating present research and in helping to direct areas of new research.

- The two general areas of research, Classroom Management and Teaching Effectiveness, which have been investigated and summarized by the AFT ER&D team, were areas of concern highlighted by teachers in national and local surveys.
- The research has been gathered as a result of thousands of hours of observations in classrooms from kindergarten through high school.
- Most of the research on management and effectiveness strategies has been done at the elementary level, but most of the strategies have proven applicable at the secondary levels. An increasing number of studies are being conducted at secondary levels, especially junior high school.
- A good portion of this research was conducted in inner-city schools. Teachers have discovered, however, that the findings are generally applicable to classroom settings in most communities and that the strategies can be effectively implemented on a wide-scale basis.

SOME THINGS TO REMEMBER ABOUT HOW TEACHERS LEARN AND FUNCTION IN INSERVICE SETTINGS

- When sharing the research materials in group formats, the leaders or trainers should adequately plan for group involvement on a participatory level. **Discussion is very important to teachers** who are anxious to talk about events and problems in their classrooms or to share their expertise with someone. (Who other than students, ever have to listen to teachers?) Try to incorporate "hands-on" experiences in your sessions:
  a) Develop role play in appropriate situations or use the ones that are included in the manual
  b) Use case studies as motivators for discussion
  c) Think of some divergent questioning techniques that will inspire teachers to respond
  d) Simulate classroom situations in which the research concept is represented
  e) Develop interesting written assignments which require that teachers reflect on their practice to respond
  f) Try to maintain a positive group dynamic by moving discussion without ignoring anyone and bringing out as many suggestions as possible for solutions to problems.
- Avoid criticism of teacher practices as teachers view their experiences as defining **who they are.** Conversely, students view experiences as things that happen to them and do not tend to personalize to the extent that adults do.
- The findings from research studies are not presented as "catch-alls" for all teachers and their students. Encourage teachers to:
  a) investigate the research concept
  b) implement it in their classroom
  c) combine new info with old practice

d) share their adaptation with the group

- Much of the research simply affirms that certain teacher practices are quite effective in given situations. Often, the information appears to be "old-hat," but upon further investigation the most experienced teachers may find it useful as a reinforcer, a prodder, a re-organizer or an additive. Let teachers know that research often supports practice.
- The research information is presented to teachers as a supplement to their knowledge-base. It is designed to help teachers make professional decisions related to their practice and to encourage them to change practice if they feel it will be beneficial to their lives as teachers. The non-threatening, non-evaluative aspects of this project tend to encourage more teachers to initiate change.

TIPS ON HOW TO HANDLE ADVERSARIAL SITUATIONS THAT MAY ARISE DURING PRESENTATIONS

- In training sessions where adversarial situations may arise, via disagreements with the research, the presenter or other participants, these approaches may be helpful:
  a) Lead an "open" discussion which allows people to air their thoughts in a non-threatening atmosphere. Set ground rules which help to avoid angry challenges and which guarantee that each participant will have the opportunity to express himself.
  b) Plan ahead—Try to bring up situation first, (Contingency Planning—you open can of worms first). If you have a sense that a certain subject is capable of stirring up controversy, take control of the situation by stating that you know some people will have problems with this, but it will be beneficial to all to discuss it.
  c) Do not take sides.
  d) Role play the situation, placing the offenders in the opposite role as a means of getting them to think through both sides of the argument.
  e) Avoid sarcasm or defensiveness as the group leader. Discourage it in others.
  f) Allow participants to describe their solutions to the problem. Present your own solutions only after others have been suggested, or if none is forthcoming.
  g) Remind teachers that these findings are a result of classroom observations of their peers.
  h) Agree to seek further information in the future to clarify a question or help to settle a dispute.

RESEARCH REPORT ON

DISSEMINATION, UTILIZATION AND CHANGE

After an initial review of the research on dissemination, the following is a synthesis of references which can be helpful to the AFT Educational Research and Dissemination Program. As part of the internal process of this project, review of dissemination and educational change literature is continuous, in addition to the review and translation of literature on classroom management and effective teaching. It is our hope that this literature will provide stimulation, motivation and guidance as we begin to develop specific training programs and dissemination models to be implemented in our three target sites and eventually replicated in other AFT locals.

Highlighted here are specific documents which bear importance on the delivery of our research literature. In addition, the attached bibliography identifies other reference sources.

Re: Staff development (in-service, profesional growth, etc.)

". . . it resembles the world's search for eternal peace. The citizens of the world seek the end of war and violence, yet somehow it always eludes their grasp. Similarly with staff development—everyone extolls its merits and sees the need for it. Many even agree on what characterizes an effective staff development program. Yet the lament from the vast majority of those who are subjected to staff development activities is that they are ineffective and generally a failure."

Williams (1979)

A SYNTHESIS OF FINDINGS ACROSS FIVE RECENT STUDIES IN EDUCATIONAL DISSEMINATION AND CHANGE

(Emrick, 1978)

Abstract

The purpose of this synthesis was to review the findings of recently completed large-scale investigations of educational dissemination and change in order to consolidate findings and implications around an issue of common interest to policymakers, program administrators, and researchers: What can be learned from these studies about processes and procedures that facilitate knowledge diffusion and utilization in schools? Five studies were included in the synthesis:

- PSDP: Sieber, S.D., Louis, K.S., and Metzger, L. **The Use of Educational Knowledge: Evaluation of the Pilot State Dissemination Program** (two volumes). New York, NY: Columbia University, Bureau of Applied Social Research, 1972 (ED 065 739; ED 065 740).
- FPSEC: Berman, P., McLaughlin, M.W., et al. **Federal Programs Supporting Educational Change** (eight volumes). Santa Monica, CA: Rand Corporation, 1975 (Volumes 1-5); 1977 (Volumes 6-8).
- PIP: Stearns, M.S., et al. **Evaluation of the Field Test of Project Information Packages** (five volumes). Menlo Park, CA: Stanford Research Institute and RMC Research Corporation, 1975 and 1977.
- NDN: Emrick, J.A., with Peterson, S.M., and Agarwala-Rogers, R. **Evaluation of the National Diffusion Network** (two volumes). Menlo Park, CA: Stanford Research Institute, 1977 (ED 147 327 and ED 147 340).
- TAG: Moore, D.R., et al. **Assistance Stragegies of Six Groups that Facilitate Educational Change at the School/Community Level** (three volumes). Chicago, IL: Center for New Schools, 1977.

Each study was national in scope, investigated one or more relatively distinct dissemination strategies, involved in-depth case study components, and made use of on-site observation and data gathering procedures. A brief synopsis of each study was prepared in a common format and level of discourse to provide essential study facts relevant to the synthesis: The dominant goal or mission and strategies of the program being studied, the prevailing dissemination and change assumptions underlying the program, the essential features of the methodology used to investigate the program, the primary findings and interpretations developed by the study.

Five major generalizations were derived from the cross-study synthesis:

- Meaningful change occurs as a process, not as an event.
- Directed personal intervention is by far the most potent technical

support resource and may be a necessary condition for many forms of utilization.

- Continuous personal participation of the implementing staff is needed to firmly root and sustain the utilization.
- Administrators occupy a crucial role in supporting the utilization process.
- Descriptive, instructional, and support materials are needed, particularly for utilizations including organizational or instructional changes.

General further considerations for which evidence is inconclusive or contradictory are discussed briefly. In addition, a number of guidelines for effective dissemination/utilization are suggested. The report concludes with a glossary of technical terms used in the synopsis and synthesis sections.

Comments

In examining these five studies, Emrick and his associates assert that indeed all of these intervention/dissemination programs have common characteristics promoting effective dissemination and change. Three overall models are represented in the synthesis: direct intervention (PSDP, PIP and TAB), directly intervene in target schools with specific innovation; capacity building (FPSEC), seed money for staff to develop their own programs; and networking (NDN), assistance is offered to schools by a regional facilitator.

The PSDP study showed some instances of "ripple effects"; increases in occurrences of information seeking by staff at sites using agents. But the findings of TAG and NDN note little ripple effect. The studies do indicate more "rippling" at initial stages rather than implementation stages. This is also borne out in the Lionberger paper summarized later.

Because of the structure of schools, it is often difficult to reach teachers unless the offer of improvement fits their beliefs as to needs and priorities. Therefore, any intervention (change agent, linker, etc.) must first help them to identify concerns and priorities and then offer resources which are need-related. These five studies indicate necessary characteristics for effective change agents.

Two skill areas are defined: human relations and technical knowledge. Evidence in the studies indicates that the development of these skills is attained by staff selection, experience, and socilization processes rather than formal training. The eventual refining of these skills mandates a good deal of time—"often many years."

The synthesis offers 13 suggestions for guiding fruitful dissemination strategies:

1. Identify and gain access to clients (teachers) using networks within their own social structure.
2. Use face-to-face communication.
3. Recognize the different levels within the system structure.
4. Target primary level of entry to the locus of impact—teachers.
5. Provide for and get prior acceptance from all administrative levels above primary entry level.
6. Make use of change agents who already exist in the target group (teacher-to-teacher).
7. Be sure that all activities between the intermediary and client meet the goals of the program.
8. Provide choice in content and style of target group.
9. Focus on a limited number of clients.

10. Emphasis on philosophy/ideology of information dissemination.
11. Involve clients in initial activity. Doing something is essential!
12. Provide repeated face-to-face encounters.
13. Anticipate that implementation will be gradual and cumulative. Studies show that two or more years are necessary before institutionalization occurs.

In Emrick's summary he concludes by saying that all five studies validate the fact that change can and does occur. Generalizations are made concerning varying dissemination programs.

1. Knowledge utilization is a process, not an overnight occurence.
2. Some form of personal intervention is necessary.
3. Using staff throughout the process is essential. One group should not initiate and another group implement.
4. Administrative support is crucial.
5. Resources at the "how-to" level are necessary.

ON LEARNING TO TEACH EFFECTIVELY FROM RESEARCH ON TEACHER EFFECTIVENESS

(Fenstermacher, 1980)

Fenstermacher raises the issue of how "bridging" of research and practice can be advantageous to the classroom teacher. The term "bridging" is synonymous with dissemination, utilization, change, etc. BTES is used as a reference throughout the article.

Bridging with Rules or using dictates on teaching does little to enhance the teacher. The administrator (or external agent) who claims "the research shows this . . ." may only intend to inform, but if he/she is viewed as an authority figure, this can be interpreted as a mandate. Rule bridging does not provide the teacher a chance to consider the research, but demands behavior changes which may not be consistent with beliefs.

Bridging with Evidence is done when research findings are used to validate/invalidate teacher beliefs and perceptions. To cite Fenstermacher's example: the teacher who believes one learns from his mistakes, may find the BTES Phase III finding: "tasks which produce low error rates provide situations where students can rapidly improve performance and continue to learn as tasks with small increases in difficulty are encounter" in conflict with that belief. In this case the research can question the rationale for the belief. In other situations, bridging with evidence may support teacher beliefs.

This type of bridging does not require a change in beliefs upon each encounter with research, only that the teacher think about the research outcomes.

Bridging with Schemata provides teachers with a way to look at different facts of teaching as reflected in the research. Once again the BTES feature (schema) of time. The time dimension is broken down into allocated time, engaged time, ALT, transition time, etc., enabling the teacher to view what he/she does and what students do in a defined context.

Quote Fenstermacher, "If teaching is an activity about which we can have knowledge, is it not reasonable to contend that those who teach ought to have what knowledge is available about what it is they do? If the answer is affirmative, it is in support of bridging with evidence and schemata, for that is precisely the point of these kinds of bridging: to provide to teachers and other educational practitioners the knowledge that others have about teaching."

TWO FOR THE PRICE OF ONE: STAFF DEVELOPMENT THROUGH THE UTILIZATION OF FINDINGS FROM RESEARCH ON TEACHING

(Smyth, 1981)

This paper, presented at AERA, focuses on two points: current staff development practices and their relative negative impact, and a study of clinical supervision done in Australia.

Centering on the first topic, Smyth cites several reasons why staff development practices for the most part have been relatively non-productive. With the exception of teacher centers, many activities are developed (or bought already packaged) without input from teachers; activities have little relevance; and many fail to recognize real teaching with all its limits. But Smyth puts the onus for unacceptance on the fact that much of the past inservice, staff development, etc., targets "deficit" teaching (Sergiovanni & Starratt, 1979).

Where the staff developer and researcher may share the same goal of educational improvement, little dialog has gone on between the two. The sad fact that, in most cases, research involves the teacher only as subject is compounded by the belief that little research relates to issues with which teachers readily identify. Blocking further use of research by practitioners is the "Research, Development and Dissemination" model of change—innovation develops outside the school and is disseminated within. This reference is also made in Emrick's "Synthesis"—the idea of using clients all the way through the process. Teachers themselves often view research as descriptive (Lieberman, 1980) rather than outcomes that can affect practice.

Smyth supports Fenstermacher's theory of "bridging" using evidence and schemata rather than generalized rules. This is also the concept put forth by Good and Power (1979):

"We suspect that the generalizations deriving from classroom research and theory have a different role from those of the natural sciences. They function not as predictors of future events but as guidelines for understanding particular situations and contexts. Thus, at best, generalizations about teaching derived from research act as guides to assessing the likely consequences of **alternative** strategies in complex educational situations. Such generalizations must necessarily be indeterminate since they cannot predict precisely what will happen in a particular case. But this does not decrease their value for the teacher: he is not interested in establishing general laws. Theories can be of value in specifying those dimensions which are relevant to the understanding of classroom phenomena, can extend the range of hypothesis (alternative strategies) considered, and **sensitize** the teacher to the possible consequences of his actions. Indeed, ultimately, the validity and usefulness of theory may rest in the hands of teachers . . . that is, whether it sensitizes them to the classroom context, helps them make more informed decisions, and to monitor their own behavior."

Using research on teaching as a focus for staff development leads Smyth to support a clinical model. This is, rather than providing one-shot workshops which take teachers out of

their daily milieu, the "clinical supervisor" provides on-going assistance in a non-evaluative fashion. This concept as Smyth defines it is somewhat similar to the two major skills needed by Emrick's change agent, i.e., interpersonal skills and technical knowledge.

Moore and Mattaliano (1973) define clinical supervision as encompassing three components:

1. helping the teacher expand his/her own perceptions in order to identify strengths and weaknesses readily.
2. helping the teacher scientifically view his own teaching so his outward behavior matches his inward intent.
3. helping the teacher solve whatever classroom problems he wants to solve.

In the true sense of the model, the supervisor works in concert with the teacher clarifying and collaborating in problem-solving.

Australian Case Study

In two elementary schools, both a principal and teacher were trained on-site in clinical supervision. University researchers acted as staff developers and observers. A "familiarization" phase dealt only with the model of clinical supervision and its processes and procedures. All training was done during the school day. Once it was determined that participants were comfortable with the model, the implementation phase—presentation of research—was introduced. (Borich, 1977; Brophy, 1979; Good, 1979; Good & Grouws, 1979; Peterson & Walberg, 1979; Rosenshine, 1976; Smyth, 1980).

Teacher and supervisor negotiated which research was to be the focus of observation in the planned lesson. Observation and discussion were used to clarify outcomes related to the use of research to test teacher beliefs:

a. confirmation of teacher beliefs about action
b. a commitment to change actions so that they aligned with beliefs
c. a rejection of research findings as being incompatible with beliefs or else impossible to implement.

Participants found this method more favorable than other staff development strategies because it allowed both parties a stronger sensitivity to each other and a better understanding of self. Using a clinical model provided information relevant to teacher decision-making and problem-solving, leading to behavior changes with which the teacher felt comfortable.

Referencing Flanders (1976), the supervisors must approach the model from a non-prescriptive perspective. This is supported by Good's (1979) caution: "I don't think it's possible to tell teachers how to teach, although it is possible to provide concepts that may allow them to reconsider their behavior and perhaps improve instruction."

DIFFUSIONS OF INNOVATIONS IN AGRICULTURAL RESEARCH AND IN SCHOOLS
(Lionberger)

While Lionberger's main arena is research related to farm practice, his paper draws some valid conclusions related to the design and use of innovation by teachers. Since a basic dissemination strategy is adoption of an "agricultural extension model," looking at diffusion of farm practice innovation as a model for schools seems useful. Lionberger's diffusion of innovation encompasses several aspects: "1) acceptance, 2) over time, 3) of some specific item, idea or practice, 4) by individuals, groups, or other adopting units, linked, 5) to specific channels of communication, 6) to a social structure, and 7) to a given system of values or culture."

"Stage-process concept." Realizing that change is a result of a series of events or invluences operating through time, the 5-stage process of a) awareness, b) interest, c) evaluation, d) trial, e) adoption is common in agricultural diffusion research—so much so that farmers can readily identify the stage they are presently in.

Lionberger points out the difference in adoption rates and the influences on those adopters. That is, early adopters (innovators) are convinced by different sources of information than late adopters. Early adopters may be willing to try new practices. Only after these risk-takers have adapted practices, are others (late adopters) willing to "buy in". The innovators are often sought after by others as validators of new practice, rather than outside "change agents"

The "community adoption process"—which can be related to school adoption—is characterized by a slow initial acceptance followed by a rapid acceptance rate, and a decreased rate when adoption is almost complete. This suggests "doing the right thing using the right people at the right time." This relates to the ripple effect cited in Emrick's work above. A good promotional strategy at the beginning nurtures dissemination of innovations. Once clients become involved, it is their own interaction which accelerates adoption, rather than the efforts of change agents. Therefore, greater effort should be expended by change agents early on in the process. Beyond that, there may be a point of diminishing return.

FINDING AND USING RECIPES FOR BUSY KITCHENS: A SITUATIONAL ANALYSIS OF ROUTINE KNOWLEDGE USE IN SCHOOLS

(Huberman, 1980)

". . . being 'rational' in such an applied field as education does not involve the application of basic disciplines to problems, as in scientific reasoning, but rather in the application of values [Fenstermacher's "beliefs"] to actions. Small wonder then that the research utilization process in education has proved so tortuous and intractable; . . . the translation of basic research into prescriptive plans of action, is probably unfruitful and costly."

So begins Michael Huberman in an attempt to determine how teachers in particular select and use knowledge. He lists validation criteria from least "scientific" to most "scientific", as follows:

1. personal feeling or intuition
2. personal experience
3. feelings, intuition and experience of **others** in the setting or similar settings
4. traditions, norms related to the settings, precedent, lore
5. judgements of persons in authority, EXCLUDING legislative and executive action
6. judgements of experts, persons with special and extended knowledge of the subject
7. quantitative measurement or evaluation of some kind using some scientific criteria
8. repeated scientific measures, or experiments, or reevaluated evidence
9. hybrid: validation by more than one of the above means.

The research Huberman cites indicates that educators tend to select knowledge using the less scientific validations, but will turn to more scientific when they are attempting to defend their position and see using scientific validation as "ammunition."

Sources of Knowledge

Sources of knowledge may be utilized or not utilized based on three dimensions: locus (proximate or distal to the user); format (personal/impersonal); and derivation (craft wisdom/scientific). The tendency is to use sources which are easily accessible, convenient and relevant to solving the immediate problem.

Huberman refers to this exchange of "craft wisdom" as "recipe sharing," and states that the focus is usually on a practical action structure—what to do—as opposed to examining the "why" of a situation in a conceptional framework. Because the teacher must meet classroom demands in a rather solitary, complex environment, there is often a little time or opportunity to request much more than the answer to "What do I do?" Therefore, simple solutions are often applied to complex problems.

Regarding knowledge transfer and utilization, Huberman offers the following pointers:

1. Innovations are likely to be tried out if they have been developed by fellow teachers or former teachers.
2. Trial and continued use are likely if results are immediate and tangible and if the innovation can be used piecemeal or easily adapted.
3. Knowledge inputs are best delivered by fellow teachers possessing:
   a. verbal-inspirational talents

b. craft sophistication

c. technical expertise demonstrated in the classroom.

"Bringing off a miraculous change in classroom performance is the most rapid way to widespread attention . . ."

LINKING PROCESSES IN EDUCATIONAL CHANGE
(Lieberman, 1977)

The School as a Social System

Teachers: Teachers perform in a paradoxical environment where they take all children, yet are expected to deal with each individually. Because they hold on to what they know and resist new methods (for various reasons), openness to innovation needs to be nurtured continuously. Collaboration and cooperation can radically alter the isolated environment in which teachers practice, but time must be provided for interaction.

Most schools have no real program, yet teachers are expected to operate within several sets of norms. In each case, the outside change agent must identify what those norms are before introducing innovation.

According to Lieberman, engaging teachers in innovation will break two powerful global norms: one, teachers believe that all teachers do the same thing; two, that working with colleagues on innovation infringes upon one's own beliefs about teaching.

Principal: As a member of this social setting, the principal **may** be the key component to change. At the very least he should be aware of what is happening to his staff.

Environment: Linking agents need to access how the school (system) functions.

Dynamics of Change Process In Schools

Concerns Based Adoption Model (Hall & Rutherford, 1975) Change takes place as the teacher goes through developmental stages of **personal** concern about the innovation matched with stages of actual **use** (Hall, Loucks, 1975). Personal concern may be time involved, through specific task concerns to the impact of the innovation on colleagues. Use is defined as the altering of behavior beginning with a request for information, examining the various consequences, and discussing it with others. The final stage is asking and searching for "more universal benefits."

Crucial factors in linkage:

1. Nature of participation—initial volunteers become resistant if not adequately supported. Volunteers do not necessarily lead to more volunteers. **Sharing** experiences is not enough, new recruits need their own experiences in order to learn.
2. Substance of change—initially should revolve around personal concerns and local problems.
3. Mechanisms—(for delivery) development cycle

new information

sharing,
collaborating,
integrating

trying out
the idea

4. New Rewards—greatest intrinsic rewards: meeting new people; creating new relationships; larger network of ideas.
5. Problem-solving process—(increase individual capacity)
   a. to identify problems
   b. to identify alternatives
   c. to develop criteria to judge alternatives

d. to try out solution
e. to evaluate usefulness
f. to start again

6. Diagnosis of social system
   a. how to enter system
   b. with whom to work
   c. what the state of the field is
   d. how fast or slow to move
   e. what activities are relevant
   f. where to start building relationships
7. Strategy-building
   a. knowledge of social system as well as new information
   b. movement from concrete to more global concerns
   c. movement on several fronts at once: personal, organizational, etc.

CONCLUSIONS

The preceding studies offer concrete suggestions for the dissemination and use of educational research knowledge which can impact on the practice of teaching.

These studies identify components which can effect successful dissemination and change. For purposes of clarity, the information is broken down into two major areas: 1) conditions which should exist for implementation; and 2) actual presentation of research information.

I. Conditions

A. Clientele—the local union

It appears the more wide-scale dissemination attempts are, the less efforts can be controlled. Therefore, at the local site level, target populations should remain relatively small. Since our dissemination model has been designated as a two-way process, the numbers of teachers who implement research findings and evaluate their results should be a number easily managed by both AFT technical assistance staff and local site staff. We are planning to target five buildings in each site in addition to more generalized in-service. For purposes of documentation and monitoring, this appears to be a workable number at this time.

The use of local teacher trainers (change agents) can be effective, if these linkers either possess or have the capability of possessing two basic skills: good interpersonal communication skills, and the technical knowledge of the research base. In addition, they (and we) need to have links to the social structure of each group involved in this process. Lieberman's article in particular stresses the significance of view teachers in their own social setting. Trainers who have already established networks can be a tremendous asset to the program.

All teachers who go through the various stages of training should have their own experiences. Development and implementation should go hand-in-hand. Too often innovation is developed by one group and implemented by another.

B. Time frame

Change can take place, but innovation and knowledge utilization is an entire process rather than a single event. It does not occur because of two-day workshops, or mandated rules governing teaching behavior. For the institutionalization of real change to take effect, a period of several years may be necessary. This does not mean that changes cannot be measured, but assessing total impact may be impossible by the end of this grant.

This also means that the ideology of process must be emphasized with all local participants. Rather than piecemeal seminars, a gradual step-by-step approach must be taken including presentation of material, implementation and follow-up.

II. Presentation of research information

Research should not be presented as a prescriptive panacea for righting all the ills of the classroom, but rather a body of knowledge which teachers can use to make informed decisions about what it is they do. However, in order to motivate the use of this knowledge, it must be seen as information which addresses real and immediate concerns. By dealing with research on classroom management and effective teaching, we are offering a body of knowledge which generally has appeal for many teachers.

The piece by Fenstermacher should be taken to heart. Training should allow time for teachers to verbalize beliefs. Research knowledge can "bridge" that belief-system with intended outcomes. The problem-solving process of Lieberman and clinical supervision model of Smyth should also be incorporated into the dissemination process for two simple reasons: one, it nutures logical, scientific information processing and decision-making; two, if we intend to report to researchers the effects of implementation of strategies based on their findings, and suggest future areas of research, a scientific, research-oriented approach will lend credence to our positions.

Two crucial elements need to be a part of the model: **dialog** among trainers and teachers, teachers and teachers; and **options** for implementation. Having "how-to's" ready to go is essential, but practioners should be given the time to develop their own strategies and a rationale for their use. By doing so ahead of time, strategies which are developed in a calm creative atmosphere as opposed to the urgent environment created by normal classroom press, can be implemented because they have been thought out and predetermined effective. In other words, we can enhance Huberman's "recipes" or bag of tricks using a more scientific approach, providing a marriage of craft wisdom and educational knowledge.

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RESEARCH TRAINING MATERIALS ON

CLASSROOM MANAGEMENT AND TEACHING EFFECTIVENESS

The research training materials in this section focus on two areas of research—classroom management and teaching effectiveness. For the purpose of identifying and selecting research of practical value for teachers, project staff defined these two terms. While there is considerable overlap, taken together, classroom management and teaching effectiveness probably make up the core of all good teaching practices. Classroom management is what a teacher does to organize and manage students, space, time, and materials at the beginning of the year and throughout the year to create an orderly flow of activities and seemingly automatically functioning classroom. It represents a combination of organizational and management skills, techniques and practices which teachers use to establish a classroom environment in which good instruction and learning can take place. By definition, classroom management is proactive in nature, seeking to create conditions which prevent or minimize opportunities for student misbehavior to occur rather than being simply reactive, only responding to misbehavior once it occurs. Without an effective classroom management system in place, students tend to be disruptive and off-task, and the teacher spends more time trying to control students than teaching them.

Teaching effectiveness is what a teacher does instructionally to maximize student learning. It represents a combination of diagnostic and prescriptive skills, instructional management skills, leadership style and instructional practices which are commonly thought of as "teaching."

The research material presented in this section has been translated for teacher use. Translation refers to a process by which statistical data and significant relationships noted in research findings are interpreted for their meaning and potential application for classroom teachers. The findings are summarized in a language which teachers can readily understand and supplemented with specific examples of teaching behaviors which reflect the research findings.

The research findings presented here are based primarily on actual classroom observations of elementary and secondary teachers. Generally, the researchers have sought to observe those teaching behaviors or practices which seem to distinguish more effective teachers from less effective teachers as determined by their ability to consistently establish and maintain well-managed classrooms and produce good student achievement gains. More of the findings are based on observations of elementary teachers than secondary teachers since there has been, until recently, a stronger research emphasis at the elementary level due to the federal government's support of research efforts designed to study the impact of early intervention programs which are also largely federally funded. However, findings from studies conducted at the secondary level support the basic management and teaching principles identified in the elementary studies. Furthermore, this project has used the

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training materials in this section with both elementary and secondary teachers and found them applicable, with some consideration for contextual differences, for both groups of teachers.
activities has a set of Directions for Trainers to guide presenters in selecting and using the activities in training sessions. Each chapter or unit also begins with an introduction which outlines the materials and other resources in the unit and suggests ways for presenting the research concepts and using the activities. Generally, the recommendations are based on two-hour training sessions. The units are arranged in this section in the recommended order of presentation with some exceptions noted in the unit introduction.

Teacher Research Linkers are encouraged to reproduce any and all of the materials in this section for use in their research training sessions with teachers. We strongly recommend that all who are being trained to use research findings be given copies of the research narratives and most of the activities. To save reproduction costs, the Reviews of Concepts are provided as good handouts for widescale workshop presentations.

The research training materials in this section are divided into chapters or units with each unit focusing on a specific research study or series of studies addressing one theme. Each unit includes a summary narrative of research findings translated for practical application in classrooms, a review of research concepts which serves as a good "quickie" handout, research references, and activities designed to stimulate teachers' thinking about the findings and their potential use in classrooms. Each of the

INTRODUCTION

This is the first chapter or unit in the research training program for TRLs. It focuses on effective classroom management practices for beginning the school year. Based on our experiences training teachers to use research, we strongly suggest that this research unit be presented first in the training series. We have found that teachers largely are skeptical of educational research and any application it might have for them and their classrooms. As the "bearers" of research, the trainers or TRLs in this program need to establish their personal credibility with the teachers they train. Linked to this credibility is the quality and usefulness of the information trainers present to teachers.

The findings from the research on Effective Classroom Management for the Beginning of the School Year are basic and straightforward. There's nothing really startling, yet it has been the most well-received body of research we've presented. While many teachers exhibit the practices identified by the research, the process of using this research stimulates them to reflect on how well they are following the practices. Many teachers pat themselves on the back. Some don't fully appreciate the significance of the findings until much later when they realize just how essential the findings are to good teaching. To summarize quickly, teachers readily "buy into" these research findings and many of their negative feelings toward the usefulness of research are disspelled.

The basic concepts presented in this research summary are:

- planning effective room arrangements
- establishing rules governing student behavior and procedures for performing instructional routines and housekeeping tasks
- teaching and reviewing rules and procedures as with any new content
- consistently enforcing rules and procedures

Since these concepts are interrelated, we recommend that they be presented together in one 2 to 2½-hour training session. There are a number of activities to supplement the presentation and discussion of concepts. The activities are designed to stimulate teachers' thinking and discussion of the concepts, particularly since this is the first activity and teachers may be less participatory. If the total presentation must be divided into two sessions, we recommend that the room arrangement with activity be presented as one 1-hour session, and the rules and procedures concepts with activities be presented as a second 1¾-hour session.

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Carolyn Evertson, Edmund Emmer and Linda Anderson of the Research and Development Center for Teacher Education at the University of Texas (Austin) conducted a series of studies of classroom management at both the elementary and junior high school levels. The purpose of the studies was to find out how effective teachers organize and manage their classes from the first days of school and maintain their management effectiveness throughout the year. The elementary study was conducted in 27 self-contained classes in 8 Title I or near Title I schools in a large, urban district. The experience level of the teachers who participated in the study ranged from 1 to 30 years. The junior high study involved 51 teachers in 11 urban schools. All of the teachers and their classes were observed intensely at the beginning of the year and then periodically throughout the year. Based on these observations, the researchers identified a group of more effective teachers who had succeeded in establishing and maintaining well-managed classrooms and a group of less effective teachers who had poorly managed classrooms. The classrooms of the more effective teachers were characterized by high levels of student cooperation, success and task-involvement. Students in these classes also made good achievement gains during the year. The observation records of the two sets of classrooms were then compared to determine what distinguished the more effective teachers from the less effective teachers in what they did at the beginning of the year to organize and plan for classes and to establish their management systems, and how they maintained their management systems throughout the year.

Evertson, Emmer and Anderson found there were striking differences in beginning of the year management styles between the more effective and less effective teachers. The greatest differences were in the areas of classroom rules and procedures, monitoring of students and delivery of consequences. The more effective teachers were distinguished by how clearly they articulated and integrated their rules and procedures into a workable system and how effectively they taught them to their students.

The better managers established clear, specific rules and procedures governing student behaviors and instructional activities prior to the first day of school. They had thought out how they wanted students to behave in the classroom and what procedures students needed to know in order to meet students' personal needs and to perform routine instructional activities and "housekeeping" activities. Effective managers created rules and procedures to guide students' behavior with respect to: the appropriateness of student talk; movement within and outside the classroom; getting the teacher's attention; storing personal belongings in "cubbies," coatrooms or lockers; using the pencil sharpener, bathroom or water fountain (elementary); lining up; using learning centers; taking down and turning in assignments; heading papers; etc. They also iden-

tified a set of strategies or logical consequences to be used either to positively reinforce good student behavior or sanction misbehavior. In short, on the first day of school, these teachers were prepared to teach their rules and procedures to their students and to respond to the demands students' behaviors might impose.

In contrast, the poorer managers did not have well worked-out rules governing students' behavior or procedures for instructional activities. One new elementary teacher reportedly had no procedures for students' use of the bathroom, pencil sharpener or water fountain. Consequently, students seemed to come and go as they pleased, enormously complicating the teachers' organizational tasks. Even if it was this teacher's intent to allow students to exercise personal responsibility for using the pencil sharpener, bathroom or water fountain as needed, some guidelines regarding the appropriateness of when to go, including emergency situations, would have helped to minimize the disruptions to the class.

The more effective classroom managers taught their rules and procedures to students just as they taught any other content area. First, they presented the rules; then they reviewed the rules, reteaching as necessary; and finally, they reinforced the rules through the application of positive and negative consequences. Review and reinforcement were especially critical because few students could be expected to follow all the rules and procedures correctly after only one presentation. In fact, Evertson and Anderson found that effective elementary school managers devoted the first three weeks of school to presenting, reviewing and reinforcing rules. After that point, all students were able to function smoothly in the classroom and the teacher could begin to concentrate more on instruction. However, even at the end of the year, more effective elementary classroom managers were observed reviewing and reinforcing their rules and procedures although not nearly as intensely as at the beginning of the year. Such feedback was an essential ingredient to maintaining an established, effective classroom environment. At the junior high level, students were already socialized into the role of being a student so considerably less time was needed to teach rules and procedures to the point where students could follow them automatically, In fact, at this level, the teacher's major responsibility was to teach his or her instructional procedures.

Better managers presented their rules and procedures in an orderly fashion over a period of days or weeks. Not all the rules were presented at once but rather as needed. Rules and procedures concerning students' personal needs such as where to sit, where to store one's personal belongings, the use of learning centers in the classroom, and how and when to sharpen pencils, use the bathroom or water fountain were generally presented first. This relieved students' anxieties over how to satisfy some of their most urgent needs and helped to foster positive teacher-student relationships by demonstrating the teacher's concern for student needs. It also aided the teacher greatly by eliminating a big source of potential disruptions later on in the day or period.

Rules governing appropriate and

inappropriate student behavior were generally taught next along with the logical consequences for students' behaviors. In presenting these rules, more effective teachers emphasized student responsibility for self, i.e., students freely choose to behave appropriately or inappropriately. If a student chooses to behave inappropriately the student can expect to suffer certain negative consequences which he or she has already been taught. More effective teachers also limited the number of rules governing student behavior to between three and six. Too many rules can complicate the teachers' task of enforcement and the student's of following. Furthermore, too many rules can erode the student's feeling of responsiblity for self. More effective teachers create mostly general rules which require thinking and interpreting on the part of the students to guide their behavior instead of very specific rules. However, some rules need to be specific such as "You may not leave the room without a pass," or "Only one person speaks at a time during discussion." Evertson, Emmer and Anderson found that rules can be stated either positively or negatively. Generally, the recommendation is that most rules be stated positively but that some may need to be stated negatively for effect.

Daniel Duke (1981), a researcher at Stanford University, supports the Evertson, et al., findings for establishing a limited number of rules and stating them in such a way as to guide rather than prescribe student behavior. He, too, advocates creating student responsibility for self. He also adds another dimension to rule establishment. He encourages articulating rules of behavior in terms of students' rights such as their right to an education in an environment free of verbal or physical abuse from other students. Duke argues that too often students' "ownership of rules" is destroyed by the creation of classroom and school rules for the protection of teachers, administrators, and school property—everyone and everything but students.

Evertson, Emmer and Anderson also found that better managers attempted to promote student ownership of rules by encouraging classroom discussions of the reasons for establishing rules, the rationale for the rules, and examples of specific student behaviors which fall under the rules. In some instances, teachers may want to present an area in which rules are needed and have the students make up the rules. This democratic approach to rule-making can be successful if used discreetly. In general, more effective teachers identify at least all the areas in which rules are needed and often define most of the rules. This places the teacher in control as the leader of the classroom and provides an immediate base for establishing expectations for student behavior.

Successful managers also integrated their classroom rules and procedures into their instruction so that important ones become part of the curriculum. Procedures governing instructional activities in particular were taught as needed and as part of the instructional activity. For example, teachers taught students how to head their papers (name, date, title or subject, etc.) at the first opportunity for students to do a paper or an assignment. Similarly, teachers taught their students how to take down assignments when the first time arose

for students to take down an assignment. The teacher explained the procedure slowly and carefully noting where and when assignments are posted and if there are any exceptions to the general procedure. The second time the teacher gave an assignment, she announced, "There is an assignment for today, please look..." and reiterated the procedure for the students. For the next few days the teacher continued to review the specific procedure. As she perceived that students understood the procedure, the teacher simply reminded the students that there was an assignment. The reminder alone was a sufficient cue to direct the students to take down the assignment appropriately. After the first three weeks, the students came to automatically look to the board for assignments without the teacher's cue.

As another example of teaching an instructional routine, consider the activity of lining up. Students need to know how the teacher wants them to line up for such activities as going to recess, the library, the cafeteria, auditorium, etc., at the first opportunity in which there is a need to line up. Teaching how to line up is not necessary before the procedure is needed because it only complicates the student's task of learning routines. To teach lining up, more effective teachers explained their procedure and the rationale for it in specific, concrete language. Additionally, teachers demonstrated the procedure and had (elementary) students practice it at least once before lining up for an activity. During the practice, effective teachers provided specific feedback to students on how well they performed the activity. For the next few times in which lining up was necessary, the teacher reviewed the procedure by explaining it again and even practicing it, as necessary.

In contrast to better managers, the poorer managers exhibited a great difference in the way the rules were presented and followed up. Like the better managers, they had rules but were often vague—"Be in the right place at the right time"—and then not clarified. Sometimes rules were introduced at an inappropriate time, as when a new teacher rehearsed lining up and exiting for fire drills on the first day. In other instances, poorer managers introduced their rules casually without discussion or without posting them, as though a single presentation to a class of third-graders or even eighth-graders would be perfectly comprehended and retained. One teacher was observed trying to institute a system in which one bell ring meant "stop talking" and two rings meant "pay attention." Unfortunately, the teacher only explained the system and did not rehearse it. Furthermore, she added the two-ring signal before the students understood the one-ring signal. The result was confusion. Another experienced but less effective teacher also used a bell as a signal system but frequently allowed the children to ignore it. This ineffective monitoring and inconsistent enforcement of the rule gave the students an unclear message about whether the rule was really to be followed. In summary, these teachers did not use rules as cues for appropriate behavior and they did not teach them to their students.

Actively monitoring the classroom and providing specific feedback to students on how well they have per-

formed a routine or behavior are essential steps in the process of teaching students to behave appropriately. Effective managers spend a good part of the first three weeks of school reviewing and reinforcing the rules and procedures they have taught. Reinforcement is consistently applied because it sets clear expectations for student behavior, indicates to the students that the teacher is aware of their behavior, and conveys the message that the teacher is in control of the classroom.

At the beginning of the year, when a student or students behave appropriately or demonstrate that they have followed a rule or procedure correctly, effective teachers reward them through praise, a special privilege, classroom treat or other form of reward which the teacher perceives will please the students. When praise is used it is sincere and specific so students know what they did well, "Johnny, thank you for pushing your chair in so quietly before coming to the reading circle," or "Class, I'm glad that you all remained so quiet and finished up your assignments while I left the room." Teacher praise of individuals or groups of students who model the kinds of behaviors teachers are trying to establish in the classroom is an effective reinforcement strategy. However, effective teachers avoid praising students for good behavior as a means of delivering a "stop or desist" message to students who are misbehaving, since this strategy embarrasses the good student who is singled out and is largely ineffective with the misbehaver.

When students behave inappropriately or do not follow classroom procedures correctly, effective managers consistently apply negative consequences or sanctions. The negative consequences should be fair and appropriate to the degree of the inappropriate behavior. For most teachers, in the beginning of the year especially, establishing eye contact with a student, frowning, or pointing a finger or some other gesture is all that is necessary to stop an inappropriate behavior. Having the student state the rule that was broken and/or explain what he or she should have done is also effective reinforcement. Sometimes having the student change seats removes him or her from a distracting environment. Higher levels of consequences might include having the student stay after school, withholding a privilege from a student, having the student agree to a behavior contract, "visiting" the principal, sending a letter home to the parents or having an informal conference with parents over the phone, having a formal conference with parents, isolating the student in a special area or room (time-out) to cool off or think about his behavior, etc.

Poorer managers were also ineffective at monitoring the classroom and providing reinforcement to students. In some cases, their ineffectiveness at monitoring was attributable to not having adequate procedures to guide students' activities. When children are wandering around the room, it is difficult for a teacher to keep track of all of them or to conduct a lesson. Many teachers busied themselves with clerical or administrative tasks at their desks early in the year rather than actively monitor the classroom and their students' performance of instructional activities. Other teachers also removed themselves from actively surveying the whole class by

devoting considerable time to working with just one child. Some teachers had not adequately prepared for their first few days and had to leave the room to get materials or go to the office. One teacher was observed leaving her pupils three times during the first hour of the first day. The result of this poor monitoring and inadequacy of rules and procedures was that the teachers effectively forfeited their leadership roles and thus their control of the class. By not actively guiding students' behaviors, the teachers permitted the students to interact among themselves and set their own behavior standards. Furthermore, as a result of the teachers' inconsistent application of positive and negative consequences with respect to student behavior, some children tended to push the limits, causing even greater disruptions to classroom environment.

Evertson, Emmer and Anderson also reported differences between more effective and less effective teachers in their instructional management styles. Many of the instructionally related problems faced by less effective managers were attributable to their poor behavior management and lack of organization. The better instructional managers were also good overall classroom managers. These teachers had worked out procedures for their instructional activities which minimized problems just as they had worked out systems for their overall management. Directions and instructions were given clearly and written on the board, and routines were established early. Students knew what they were expected to work on and what they could do once their regular work was completed. Students were often assigned the role of helper to facilitate passing out or collecting materials or to generally assist when the teacher was working with another group. Teachers taught their instructional routines like their behavior management routines, step by step, monitoring to see that all students understood the routines and providing reinforcement.

More effective managers described their objectives more clearly, used a greater variety of effective materials, always had their materials ready and gave clear directions. Their activities and lessons were presented more clearly with smoother, shorter transitions. To relieve occasional tedium and compensate for students' attention spans at the elementary level, effective teachers used a variety of instructional activities including singing and dancing. They carefully planned the sequence of their activities, considering scheduled physical education, art, and music classes. Effective teachers also structured their activities to provide reasonable work standards and a high degree of success for their students.

Both more and less effective instructional managers used a variety of approaches in reading and mathematics instruction. Some highly individualized systems for reading instruction were used by both groups, although grouping into three or four groups and basal instruction (elementary) was used most frequently. In arithmetic, the mode of presentation varied between totally individualized systems, groups and whole class instruction. The worst instances of instructional management occurred when new teachers tried to use individualized instruction. The combination of inadequate procedures,

vague directions and poor monitoring resulted in frequent off-task behavior and occasional chaos.

Another important element of classroom management, identified by Evertson, Emmer and Anderson, was how well teachers coped with various constraints including the physical organization of the classroom. Effective managers had a good room arrangement which helped to eliminate potential distractions for students and opportunities for inappropriate behavior, and permitted easy monitoring of students at all times. All furniture was arranged to facilitate easy flowing traffic patterns, avoiding congestion in such high traffic areas as the pencil sharpener, trash can, water fountain, lavatory or work area. Desks and learning centers were grouped based upon students' instructional and behavioral needs. Storage areas were also arranged for easy access by both teachers and students. Effective managers were able to take stock of their rooms and the characteristics of their students and develop a room plan which met their instructional, behavioral and organizational needs.

Other constraints frequently placed on teachers included: interruptions caused by late arriving students, parents, administrators or other school personnel on the first day of school; insufficient supplies and inadequate facilities; and the arrival of new students one or two weeks after the beginning of the year. Effective managers had better procedures for coping with these constraints. They had identified potential problems before the school year started and developed procedures and alternatives for meeting the problems. If there were interruptions, teachers did not attend to them until they had their students engaged in a specific activity. Especially during the first few days, teachers would not leave the room unless absolutely necessary. Where possible, the teacher would invite a visitor, e.g., a parent or administrator, into the classroom to pursue a conversation, rather than go into the hall. In this way, effective teachers maintained the surveillance of the classroom (See Kounin's "with-it-ness") and their leadership role. If new students were expected, student helpers were appointed to acquaint the new student with classroom rules and procedures and the teacher monitored them to insure they understood the system.

FIRST DAY OF SCHOOL

Better classroom managers planned their first day for maximum contact with their students and for establishing themselves as the leader of the class. These teachers recognized the importance of their students' first experiences with the classroom and with them.

Effective managers greeted their students at the door, handing them name tags (elementary) and directing them to their assigned seats. This simple teacher behavior insured that their students would enter the classroom in an orderly fashion and be ready for their first activity in minimal time. This also helped to establish the teacher as leader of the class and illustrated an important procedure for how students enter the classroom.

Effective teachers stayed with their class even when parents interrupted or the office called. They invited visitors into the classroom if they wanted to talk. In this way, the

teacher never relinquished her responsibility for monitoring the classroom. If the teacher had to leave the classroom, she tried to arrange it for later in the day or period, after she had established some clear expectations for students working on an assignment. (Note: this may require administrative cooperation.)

As soon as most students had arrived and were seated, effective elementary teachers began introducing students to the room, explaining what each area was and how it would be used. All teachers carefully explained their rules and procedures giving examples and rationale. Not all the rules or procedures were presented, but only those which addressed students' immediate concerns or were needed for initial activities. In short, students were taught what they first needed to know (and could apply), but were not overloaded with information. Many of the rules and procedures were either posted in the room for the students' review or given to them as a hand-out.

In contrast, in classrooms of less successful managers, students' first experiences with the room and teacher were less orderly. Teachers were observed sitting at their desks taking care of some administrative task or talking with parents or others outside the room. Their initial contact with students was minimal. Consequently, they forfeited an opportunity to take control and guide students' behaviors. Students entered the room noisily, talking to each other, and exploring the room on their own without precise instructions on where to sit or what they should do. These teachers frequently left the classroom, having given little or no information to guide student behavior. Some of these teachers also failed to introduce students to their environment or to set expectations for student behavior. Consequently, students either wandered around on their own, or interrupted the teacher frequently for information on how to use a learning area or equipment, how to use the bathroom or water fountain, how to head a page, or what materials to bring to class. These interruptions seriously complicated the teacher's managerial and instructional role.

Introducing students to one another was also an important activity for effective managers. They saw this as the first opportunity for students to establish their identity and to make a contribution to the group. Thus, these teachers tried to make this an easy and enjoyable task for students. Less successful managers either overlooked this important activity or conducted it in such a way as to make it uncomfortable for students.

At the elementary level, when the first academic activity was introduced, effective teachers made sure it was a simple, enjoyable one such as drawing or coloring. The teacher did not attempt to group children or begin with workbooks or readers or other heavy academic activities. The teacher stayed with the total class, monitoring closely and giving clear, specific directions. This behavior helped to foster positive teacher-student relationships and student-learning attitudes. It maximized the amount of time for teacher-student interaction and gave the teacher a greater opportunity to observe and assess her students' needs. By using this mode of whole class instruction for the first few days, teachers could easily and actively monitor the entire class, establishing themselves as classroom leaders and stopping inappropriate behavior immediately. This

reinforced the teacher's expectations for student behavior and helped to establish a productive environment for learning early.

To summarize the Evertson, Emmer, Anderson research, more effective managers assumed leadership in their classrooms from the beginning, introducing students to their new environment and the appropriate ways of functioning in it. These teachers systematically taught their rules and procedures for operating in the classroom and school to their students in discreet steps. They actively monitored the class to be sure that all students understood their system and functioned accordingly. During the first three weeks of school especially, they emphasized rule presentation, review, and reinforcement. Thereafter, most students were uniformly ready to behave appropriately and shift in emphasis to instruction could easily be made. Effective managers continued throughout the year to actively monitor the classroom and provide positive and negative reinforcements to maintain their leadership of the class.

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RESEARCH ON

EFFECTIVE CLASSROOM MANAGEMENT FOR THE BEGINNING OF THE SCHOOL YEAR

A REVIEW OF CONCEPTS

1. More effective classroom managers are distinguished from less effective managers by the following teacher practices. More effective managers:
   - have good room arrangements;
   - establish clear, specific rules governing student behavior and procedures for conducting routine instructional and housekeeping activities;
   - teach their rules and procedures to students as they would any other new content area;
   - consistently enforce their expectations (re: rules and procedures) by monitoring student behavior and applying reasonable and appropriate consequences
2. A good room arrangement is essential to effective classroom management because it eliminates potential distractions for students and minimizes opportunities for students to disrupt others.
3. A good room arrangement is one which:
   - permits an easy flow of traffic throughout the room avoiding congestion in high traffic areas such as the pencil sharpener, storage areas, reading group, exits, etc.
   - arranges students' seats so students can easily see instructional displays and presentations.
   - insures high visibility so the teacher can quickly and easily monitor students in all areas of the room.
   - facilitates ready access to storage space and necessary materials.
4. Before school starts, effective classroom managers plan how they want their classrooms to operate and develop a set of rules and procedures to meet their expectations.
   - Rules govern student behavior such as student talk, respect for others and their property, etc. Effective managers limit their rules to 3 to 6, stating them in generic language which encourages students to take responsibility for their behavior. Some rules may be specific.
   - Procedures apply to specific instructional routines or housekeeping tasks such as: storing personal belongings, using the bathroom or water fountain, distributing and collecting materials or assignments, getting the teacher's attention, lining up, movement within the classroom or to other school areas, heading papers, taking down assignments, etc.
5. Effective managers re-evaluate their rules and procedures throughout the year. In particular at the beginning of the year, they develop alternative procedures in the event their tried and true methods don't work with this year's class.
6. Effective managers teach their rules and procedures to students just as they would any other content area. This involves:
   - presenting rules and procedures as they are needed by students

- carefully explaining the rule or procedure, demonstrating it as necessary
- leading a discussion of the rationale and application of rules and procedures
- having students practice procedures as necessary
- providing feedback to students
- reviewing and re-teaching as necessary rules and procedures to the point where they become automatic for students (usually 3 weeks).

7. Effective managers also develop a reasonable system for consistently reinforcing their rules and procedures which includes positive feedback and rewards for good behavior and fair and appropriate consequences for inappropriate behavior.
8. Effective managers establish a hierarchy of consequences or sanctions which they feel comfortable administering. A hierarchy of consequences might range from: a) establishing eye contact, pointing a finger, moving closer to the student to b) having the student re-state the broken rule, conferencing with the student, withholding a privilege, assigning detention, to c) contacting the parents, behavior contracting or visiting the principal.

RESEARCH SUMMARY
ON
EFFECTIVE CLASSROOM MANAGEMENT
FOR
THE BEGINNING OF THE SCHOOL YEAR
AT A LOW SES JUNIOR HIGH SCHOOL

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THREE CASE STUDIES

- **THREE TEACHERS:**
  One very effective—scored high on all process and product measures (e.g.—students on task, occurrence of disruptive behavior, achievement gains)
  One less effective
  One who appeared effective at beginning of the year, but in whose class behavior problems arose
- **THE SCHOOL:**
  Located in low socio-economic, urban minority neighborhood. Fairly young staff, principal in his first year. Community structure used—teachers in different content areas shared same group of students with a common preparation/conference time. School climate was rather permissive, rules against tardiness were not enforced and many teachers were lax in procedures for students leaving the room for water, using the restroom, going to lockers, etc.
- All three teachers (A, B, C) had had previous experience in this school with Teacher B having the least. All three taught either 7th or 8th grade math or English.
  Teacher A—19 students, achievement levels 2.6 to 9.8 CAT mean-10 raw score points below grade level, 75% of class achieved at or above grade level
  Teacher B—22 students, achievement levels 2.1 to 6.8 CAT mean-13 raw score points below grade level, 69% achieved at or above grade level
  Teacher C—23 students, achievement levels 3.4 to 7.0 CAT mean-11 raw score points below grade level, 76% achieved at or above grade level

PERCENTAGE OF STUDENTS ON TASK

	Beginning of Year	Mid-Year	End of Year
Teacher A	89%	94%	student teacher
Teacher B	73%	85%	81%
Teacher C	98%	91%	81%

FIRST DAY ACTIVITIES IN THREE JUNIOR HIGH SCHOOL TEACHERS' CLASSES

Teacher A		Teacher B		Teacher C	
Introduction of teacher and roll call	5 minutes	Filling out information cards and roll call	9 minutes	Introduction of teacher and roll call	2 minutes
Presentation of rules and procedures	21 minutes	Presentation of rules and supply requirements	8 minutes	Presentation of rules and procedures	12 minutes
Election of class officers	2 minutes	Diagnostic test	21 minutes	Filling out information cards	7 minutes
Preview of week's activities	7 minutes	Oral review of rules and supply requirements	2 minutes	Seatwork	33 minutes
Seatwork	18 minutes	Free time: students talking or waiting	16 minutes		
Closing	1 minute				

Taken directly from the R&DCTE Report NO. 6104

DISRUPTIVE BEHAVIOR

	Beginning of Year	Mid-Year	End of Year
Teacher A	Very Little (1.5)	Very Little (1.0)	—
Teacher B	Higher than A or C (3.67)	(2.33)	Higher than A or C (3.00)
Teacher C	Very Little (1.17)	Escalates (3.33)	Decline (2.00)

1 = no disruption; 5 = high frequency of disruption

INAPPROPRIATE BEHAVIOR

	Beginning of Year	Mid-Year	End of Year
Teacher A	1.5	1.25	—
Teacher B	3.50	3.67	4.75
Teacher C	2.00	4.00	4.50

FIRST DAY ACTIVITIES

Teacher A spent more time going over rules and procedures. Both Teacher A and Teacher C gave seatwork assignments which were relatively easy, leading to student success. Teacher C used the 33 minute seatwork time to gather information for a future activity from each student thereby providing all students with teacher contact the first day.

Students in A's and C's classes were cooperative and quiet the first day. B's class, however, suffered a good deal of disruption and inappropriate behavior (primarily from one group) which she frequently ignored. Rules presented were vaguely stated and other important facets of routine were not mentioned. Little leadership or direction came from this teacher and her credibility was quickly undermined.

THE FIRST THREE WEEKS

Rules and Procedures

Teachers B and C did little beyond the first day to teach and/or reinforce rules and procedures. Teacher A, on the other hand, devoted some time almost every day to the presentation, review or discussion of rules and procedures amounting to almost ⅓ of the class time. Most areas of classroom behavior were covered and both positive and negative consequences were discussed.

Teacher B ignored several areas of behavior (ie. call-outs, leaving seats or room, make-up work) and presented no consequences.

Teacher C omitted any policy on leaving the room during class and spent more time than the others on school-wide procedures (probably a 7th grade class).

Consistent Enforcement and Feedback

Teacher A was fairly consistent in "desisting" or stopping off-task behavior, sometimes ignoring inappropriate behavior only when it was short and not distracting to the class. She did assign demerits for students not having supplies and reviewed the reasons for certain rules and procedures.

Teacher B ignored a lot of misbehavior (e.g., call-outs, paper throwing, cheating, off-task). When reprimands and threats were given, she seldom followed through. Responses to call outs were sometimes negative, sometimes positive.

Teacher C was weak in enforcing rules (tardiness, call-outs). Inappropriate behavior was ignored often allowing it to escalate. Sometimes when misbehavior was desisted it was not punished. She did not ignore non-workers or students out of seats.

Clarity of Directions and Instruction

Both Teachers A and C were clear and specific in presenting directions and instruction in a step-by-step sequence. Teacher C often used an overhead to demonstrate assigned tasks to students. In B's class, a good deal of confusion on the part of students was noted by observers. Visual aids were seldom used.

Knowledge and Understanding of Students

Once again Teachers A and C seemed to have a more significant awareness of student abilities, interests, etc. Observers reported A's specific awareness of attention spans and her use of a variety of activities within a period. Teachers A and C

provided high success rate activities during the first several weeks, avoiding more complex assignments.

B seemed unaware of her students low academic ability, hence a lot of student frustration over too difficult tasks. Students were expected to take lecture notes the second day with no assistance.

Student Accountability

Teacher A—Student folders for in-class work. Assignments collected.

Teacher B—Encouraged but did not require students to finish classwork at home. Classwork usually not collected or monitored.

Teacher C—Collected all papers and gave academic feedback frequently during first three weeks. Assigned and collected homework during the second week announcing five-point penalty for late work. Monitored seatwork and called on all students during recitation.

Time Use and Class Routines

Teacher A—No "dead time." Employed a beginning-of-the-class routine which effectively got students on task.

Teacher B—Continued to have "free time," between 5-10 minutes, at the end of the class. Used a beginning-of-the-class routine (copy assignments, pick up materials for work that day) but did not ask all students to comply. No dismissal routine.

Teacher C—No beginning-of-the-class routine, but a consistent dismissal routine.

Standards for Students Behavior

Teacher A maintained a low level of student talking during seatwork. Students were expected to remain in assigned seats and to leave the room only for "emergencies." During seatwork students raised hands for help, but during discussions call-outs were accepted. Observers noted no inappropriate call outs.

In Teacher B's class there were no assigned seats and students were often "wandering" around the classroom. Students were fully permitted to leave the room and did so often, even the first day. Called out comments and questions were permitted, but B was inconsistent in dealing with them—positive, negative or ignored responses. Students openly engaged in conversation during seatwork.

Inappropriate behavior was rare on the first two days of Teacher C's class, but increased during the second and third weeks. Some talk was allowed during seatwork, especially peer-tutoring. As talking increased, however, Teacher C employed an ineffective "shush." Call-outs were accepted when she was not calling on a specific student, but the problem soon became chronic and C often had to remind students of the procedure. "Violations" were ignored, corrected, but never punished. Assigned seats were often empty due to "socializing" on the way to the restroom, pencil sharpener, or teacher's desk. More tardies were observed here, one or more per day, which were often ignored.

Teacher Leadership Role

Teacher A maintained a constant leadership role. When working with individual students (testing), she made sure the rest of the class had been given seatwork tasks and monitored them, small group work was handled

the same way. Teacher A used the entire period, then dismissed students.

Teacher B often left the class with no structure, particularly during "free time." She interacted with few students during these times. B often gave up her leadership role by spending extended periods of time with one student, or a small group and not attending to the rest of the class.

Teacher C, during the first three weeks, maintained whole class instruction and interaction, even when addressing student concerns.

REMAINDER OF THE YEAR

Classroom narratives by observers showed that Teacher A was able to maintain a high level of student cooperation, behavior and task orientation throughout the year. Students achieved a great deal and liked the class.

Teacher B's class also maintained the same level—inappropriate, disruptive, and off-task behavior, student confusion and frustration. Student achievement and attitudes, while not particularly low, measured lower than the other two classes.

Teacher C began well, but appropriate student behavior and orientation to task decreased significantly after the first three weeks. Student achievement was at expected levels and attitudes were positive, but increasing discipline problems put a strong demand on teacher time.

Observers noted two probable causes for C's breakdown:

1. Consistency and Consequences—Rules were not consistently enforced and when disruption occurred the teacher seldom "punished" students. By the time discipline problems escalated she was too late.
2. Changes in Class—The first three weeks were primarily devoted to whole class interaction with the teacher. Afterward, however, there was a shift from whole class presentation and recitation to more time spent in seatwork. As seatwork increased, so did the need for individual help, thereby "tying up" the teacher while other students waited. While the shift may have been necessary (after the first few weeks of review, students began new work at different levels) the teacher did not provide a smooth enough transition from one format to the other.

While this was a limited case study, findings were consistent with those of the larger junior high school study. In addition, after having been presented with the findings of the Beginning of the Year Classroom Management study at the elementary level, one can see that there are various characteristics of more effective managers which surface regardless of grade level and school organization.

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DIRECTIONS FOR TRAINERS

1

Training Activity
for
BEGINNING OF THE YEAR CLASSROOM MANAGEMENT RESEARCH

TITLE: "Starting the Year Right: Room Arrangement"

OBJECTIVES: To develop optimum room arrangements based upon the guidelines for effective room arrangements identified in the Beginning of the Year Classroom Management Research

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15 to 35 minutes

PREPARATION: Provide each participant with the following activity materials:

1. directions
2. Guideline for Room Arrangements
3. classroom furniture cutouts reproduced on colored paper (preferably)
4. large piece of plain paper to serve as the classroom floor
5. paste, glue or tape
6. scissors

Ideally, the furniture cutouts should be reproduced on different colored paper and cut out in advance so participants can quickly and easily arrange and paste them on their floor plan. If you don't have the time, you can simply provide the participants with sheets of the furniture pieces which they can cut out themselves. Another, less effective but time-saving approach is to provide the participants with colored pens and plain paper for drawing room arrangements.

DIRECTIONS: As noted in the preparation comments, this activity is best performed by having participants manipulate the furniture pieces, arranging them on the paper according to the dimensions of their room and other physical limitations. This activity has been an especially popular one because it forces teachers, who haven't previously found the time, to reflect on their room arrangements and design one that is most effective for their room, their students' needs and their instructional style. Some teachers are aware of existing problems in their room arrangements but haven't identified solutions.

Direct teachers to draw a basic floor plan on the plain paper provided indicating doors, windows, closets or storage rooms, lavatories, wash basins, learning centers or other permanent fixtures, etc. Then have them either design an optimum room arrangement, using the furniture pieces provided adding other pieces as necessary (create what's needed) or layout their current arrangement, analyzing it for trouble-spots. If they're already aware of a problem, encourage them to work out a solution. Encourage the teachers to work in groups so that they can share their ideas or problems with others as they work.

After all the participants have designed a room, have them share their designs with the whole group. Those who still feel they have problems with their rooms can ask for suggestions from the group.

Guidelines for Room Arrangement*

KEYS TO GOOD ROOM ARRANGEMENT

High traffic areas are free of congestion.

Students are always visible to the teacher.

Storage space and necessary materials are readily accessible.

Students can easily see instructional displays and presentations.

AVOID UNNECESSARY CONGESTION IN THE FOLLOWING AREAS:

- Group work areas, centers and stations
- Pencil sharpener and trash can
- Bathrooms, sink and water fountain
- Bookshelves and storage areas
- Students' desks
- Teacher's desk

TIPS FOR ARRANGING FURNITURE

- Make sure all students can **easily** see:
  You, when you are presenting information
  Chalkboards
  Overhead projector screen
  Instructional displays
- Keep in mind potential distractions such as:
  Windows and doors
  Animals or other interesting displays
  Small group work areas
- Leave plenty of room around student desks so that you can get to each student when monitoring.
- Locate your desk, work areas and instructional areas where you can see **all** of the students **all** of the time. Avoid placing centers and work areas in "blind corners" where you will not be able to monitor adequately.
- Plan to seat students who need extra help or attention close to where you will be most of the time.
- If you must use tables or desks with inadequate storage space, you will want to have "tote trays" or boxes for student belongings and materials. These should be easy for students to get to, but out of the way.
- Even if other arrangements are to be used later in the year, consider placing students desks in rows facing the major instructional areas at the beginning of the year. This minimizes distractions for the students and allows the teacher to monitor behavior more readily and to become familiar with individual students' work habits.

STORAGE SPACE

- Place instructional materials that you will need where they are easily accessible to instructional areas.
- Include adequate, convenient space for students' coats, lunch boxes, show-and-tell items, and materials.
- Find easily accessible shelves on a bookcase for those everyday books and materials that will not be kept in student desks.
- Place long-term, seldom-used or special occasion items at the back of cupboards, on top of cabinets, or out of the room, if possible.

OTHER THINGS TO CONSIDER

- Plan a particular location, easily seen by all students, where you will post assignments for the day (or week, if possible). This can be done on the chalkboard, a bulletin board, poster on a wall, large tablet, or individual assignment sheets.
- Check all electrical equipment (e.g., overhead projector, record player, movie projector) to be sure it is working and that you know how to use it, **before** using it in class. Be sure a plug is within easy reach, or have a sturdy extension cord available. Plan a space to post instructions for the use of complicated equipment.
- Wall space and bulletin boards provide extra areas to display rules, procedures, assigned duties, calendar, schecule, student work and extra credit activities. In addition, ceiling space can be used to hang mobiles, decorations, and student work, and windows cay be used for displays, decorations, and student work.

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*Developed by the Classroom Organization and Effective Teaching (COET)Project, Research and Development Center for Teacher Education, The University of Texas at Austin 78712. This project was supported in part by the National Institute of Education, Contract OB-NIE-G-0116, P2. The opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by that office should be inferred.

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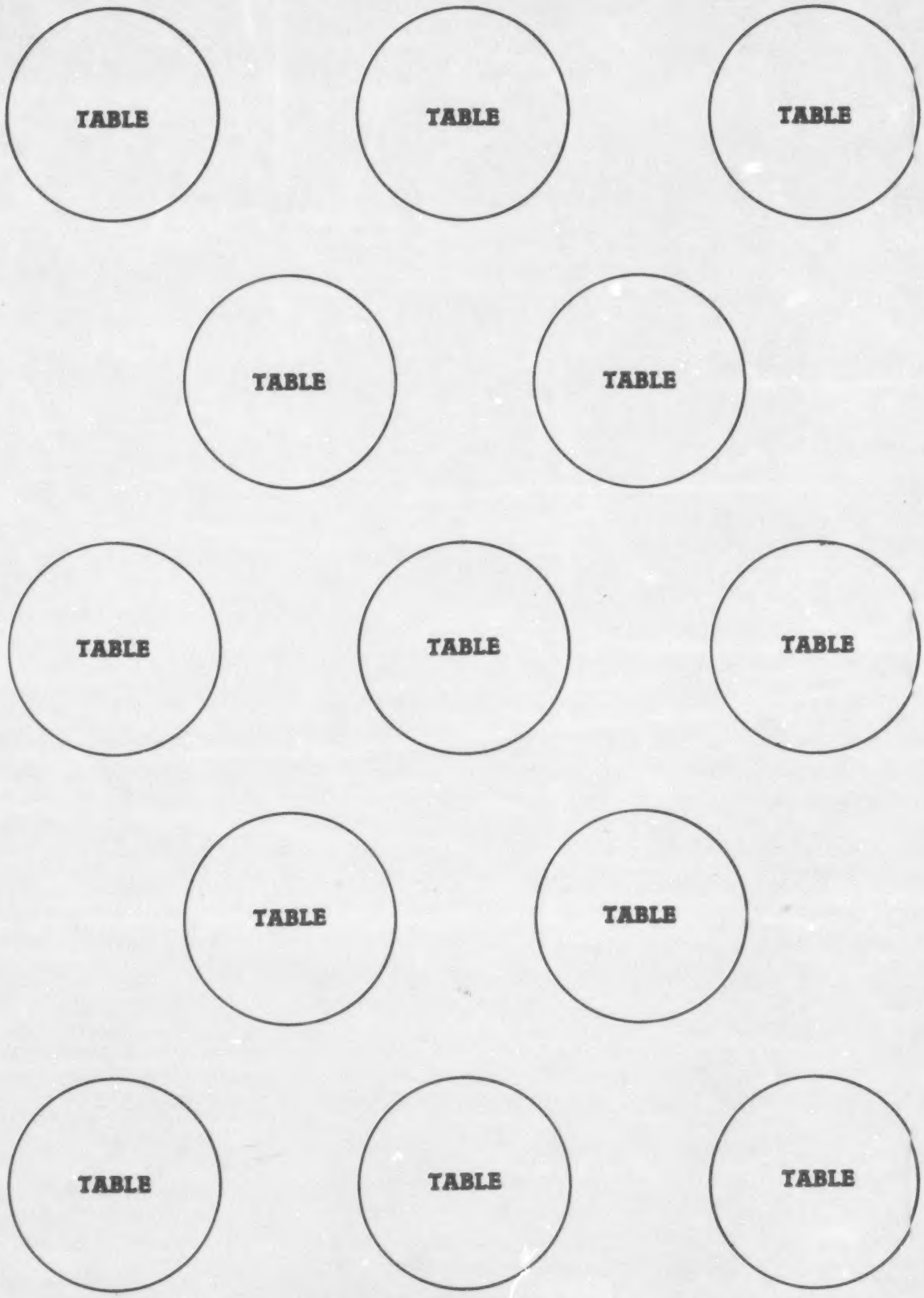
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DIRECTIONS FOR TRAINERS

2

Training Activity
for
BEGINNING THE YEAR CLASSROOM MANAGEMENT RESEARCH

TITLE: "Keeping on the Right Track!"

OBJECTIVES: To develop an awareness of the many instructional and housekeeping procedures which are necessary for the smooth functioning of a classroom and to identify effective procedures for meeting the many needs

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers scan the Classroom Procedures Checklist to get a feel for the kinds of procedures that are necessary for the smooth operation of a classroom. Select several topics for procedures and ask teachers to share their strategies. Encourage teachers to identify specific topics for procedures they might like the group to discuss. Be sure to address several management type procedures as well as accountability type procedures.

"KEEPING ON THE RIGHT TRACK!"

Training Activity
for
Beginning the Year Classroom Management Research

The research on Effective Classroom Management at the Beginning of the School Year emphasizes planning before school begins how you want your classroom to function and what procedures will be necessary for its smooth operation. More effective teachers also carefully teach students these instructional or housekeeping routines, reviewing and re-teaching them as necessary. Use the attached Classroom Procedures Checklist to make sure you have a procedure for each of the topics noted. Carefully consider how well each procedure is working with this year's class. Sometimes those old tried and true procedures that always worked before just don't click with a group of students. Develop an alternative procedure where one seems needed. Share your strategies with others.

Keeping on the Right Track!

CLASSROOM PROCEDURES CHECKLIST

This exercise is adapted from the training manuals, **Organizing and Managing the Elementary School Classroom** and **Organizing and Managing the Junior High Classroom** developed by the Classroom Organization and Effective Teaching Project, Research and Development Center for Teacher Education, The University of Texas at Austin.

EDUCATIONAL RESEARCH AND DISSEMINATION PROGRAM

TOPIC	RULE/PROCEDURE FOR STUDENTS
I. Use of Room Areas A. Students desks/tables and storage areas B. Learning Centers, stations C. Shared materials, bookshelves, drawers D. Teacher's desk and storage area E. Drinking fountains, sink, bathroom, pencil sharpener	
II. Use of School Areas A. Bathrooms, drinking fountain, office, library, etc. B. Lining up procedures C. Cafeteria or lunchroom D. Playground or other school ground	
III. *Beginning School Day or Starting Class A. Attendance, early dismissal students B. Tardies C. Behavior during PA announcements D. "Warm-up — Routines — "Do nows" E. Distribution of material or supplies	

*(Elementary level primarily)

TOPIC	RULE/PROCEDURE FOR STUDENTS
IV. Instruction/Whole-class activities/ Seatwork	
A. Teacher-student interaction	
B. Movement within room	
C. Cues for student attention	
D. Paper headings	
E. Student talk	
F. Making assignment	
G. What to do when seatwork is finished	
H. Safety precautions	
V. Small Group Activities	
A. Student movement to and from group (lab stations)	
B. Bringing materials to group	
C. Expected behavior of students in group	
D. Expected behavior of students not in group	

TOPIC	RULE/PROCEDURE FOR STUDENTS
VI. Ending School Day or Class	
A. Clean up and putting materials away	
B. Organizing for different classes	
C. "Wind-down" routine or activity	
D. Dismissal	
VII. Miscellaneous	
A. Movement outside classroom	
B. Fire/disaster drills	
C. *Housekeeping and student helpers	

TOPIC	STUDENT ACCOUNTABILITY RULE/PROCEDURE POLICY
I. Student Work A. Paper heading B. Pen or pencil? C. Neatness D. Incomplete assignment E. Late Assignment F. Missing Assignment G. Due dates/*times of day H. Make-up assignments	
II. Assignments A. Where posted? B. Explain assignments to various groups C. *Keeping students working from one assignment to next D. Let absent students know what is to be made up E. Explain grading	

TOPIC	STUDENT ACCOUNTABILITY RULE/PROCEDURE POLICY
III. Monitoring	
A. How do you check on all students?	
B. Check work-in-progress for errors	
C. Achieve total participation in discussion	
IV. Checking Work	
A. Students exchange papers	
B. How do they mark papers?	
C. Students turning in papers	
D. Keeping track of work that is/is not turned in	
V. Feedback and Grading	
A. Giving specific feedback—grades, written comments, conferences	
B. Determine reportcard grade 1. What's included? 2. How is it weighted?	
C. Grading daily assignments	
D. Recording grades	
E. Have students keep record of grades	
F. Returning graded work to students	
G. Having students correct mistakes	
H. Checking and returning corrections	

DIRECTIONS FOR TRAINERS

3

Training Activity
for
BEGINNING THE YEAR CLASSROOM MANAGEMENT RESEARCH

TITLE: "Rules of the Road"

OBJECTIVES: To develop a greater awareness of the diversity of rules governing student behavior in classrooms and alternative strategies for applying consequences or sanctions when students break rules

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read the activity and write down 2 or 3 rules they've established governing student behavior. Also ask teachers to list potential consequences they might impose for failure to follow their rules. Stress listing a hiearchy of consequences which are appropriate to both the severity of the misbehavior and the number of times the rule has been broken by the student. Also discuss the importance of establishing consequences which the teacher can "live with," i.e., be willing to impose. Encourage teachers to share their strategies with the group.

Hint: The discussion on consequences can be particularly beneficial because it serves to identify alternatives for coping with typical problems in classrooms. Some teachers may want to discuss how to handle fighting or abusive language while others may want to discuss strategies for dealing with students who come unprepared for class. This discussion can become very sensitive as teachers may not always agree with the consequences used by others. An example might be imposing academic sanctions for behavioral infractions.

"RULES OF THE ROAD"

Training Activity
for
Beginning the Year Classroom Management Research

The research on Effective Classroom Management at the Beginning of the School Year stresses the importance of clearly establishing 3-6 general rules governing the behavior or conduct of students in the class, the "rules of the road." The research also advocates that teachers plan ahead how they will respond to students who don't follow their rules and that they teach these consequences to students just as they teach their rules. In the space provided below, identify two or more behavioral rules you insist upon in your classroom. Next to the rule, develop 2 or 3 well thought out consequences or sanctions you would apply the first time students "broke" your rule, the third time, and later when the problem is becoming more chronic.

Behavioral Rules	Consequences or Sanctions
A.	1.
	2.
	3.
B.	1.
	2.
	3.
C.	1.
	2.
	3.

DIRECTIONS FOR TRAINERS

4

Training Activity
for
BEGINNING OF THE YEAR CLASSROOM MANAGEMENT RESEARCH

TITLE: "Teaching Rules and Procedures"

OBJECTIVES: To identify effective approaches for presenting rules and procedures based on the Evertson, Emmer and Anderson research.

PROCESS: Roleplay

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 20 to 45 minutes

PREPARATION: Reproduce activity for appropriate number of participants. Make sign posts depicting each of the rules and procedures in the scenario to serve as props for the actors in the roleplay (optional).

DIRECTIONS: Have the participants read the entire activity. Select one or two (or more) participants to roleplay the part of the teacher presenting rules to his or her class on the first day of school. Let the "teacher" select the two rules he or she wishes to teach the "class."

Encourage group discussion of the roleplay(s). Focus upon the "teacher's" specific behaviors which reinforce the research concepts concerning teaching rules. Use the discussion questions as a guide.

DISCUSSION QUESTIONS:

1. Are the rules or procedures clearly stated?
2. Does the teacher offer the rationale for the rule or does he or she encourage the students to identify the rationale?
3. Does the teacher demonstrate the rule or have students demonstrate it?
4. Are students given the opportunity to practice or discuss the rules?
5. Are there other things which can be done to enhance this teaching process? (Use or refer to props, post rules, etc.)

"TEACHING RULES AND PROCEDURES"

Training Activity
for
BEGINNING OF THE YEAR CLASSROOM MANAGEMENT RESEARCH

Read the following classroom scenario concerning the first day of school and the establishment of rules and procedures. Keeping in mind the Evertson, Emmer and Anderson research on teaching classroom rules and procedures, select two of the rules and decide how you would best present them to the class.

CLASSROOM NARRATIVE

It is the first day of school and students have already arrived in class. Among the rules and procedures which the teacher plans to teach students this period are:

- all personal belongings are to be stored in the student's "cubby" or locker
- students must raise their hands to get the teacher's attention
- before leaving the classroom, students are to line up in the following manner . . .
- students are to show respect for one another and their belongings
- students must be silent whenever the teacher or others are speaking to the class; at other times students may be quiet which means a soft whisper

The teacher has written each of her rules on individual sign posts, complete with illustrations, to serve as reinforcement for the class. After greeting the class and orienting them to the room, the teacher begins teaching some of her rules and procedures to the students. She starts by saying . . .

DIRECTIONS FOR TRAINERS

5

Training Activity
for
BEGINNING OF THE YEAR CLASSROOM MANAGEMENT RESEARCH

TITLE: "Holding It Together"

OBJECTIVES: To identify effective approaches for reinforcing rules and procedures to insure student cooperation

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15 to 25 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have the participants read the entire activity. Encourage them to discuss how they might handle this class, drawing upon their own experiences and the research findings on teaching, reinforcing and enforcing rules. Some of the points which should come out in this discussion are:

- the need to reteach or review the rules to insure students understand them and know what is expected of them; perhaps encouraging discussion of the rules and rationale
- the need to reinforce the rules through positive feedback and consequences
- the need to apply consequences in a hierarchy, not just reminders and removal. Name some consequences in between.
- the need to exert leadership and apply the consequences outlined (students obviously thought they could "get away" with misbehavior)
- perhaps the need to have students set the rules and consequences

"HOLDING IT TOGETHER"

Training Activity
for
BEGINNING OF THE YEAR CLASSROOM MANAGEMENT RESEARCH

Read the following classroom narrative concerning a less effective teacher's approach to handling students who fail to follow rules and procedures. Drawing upon your experiences and the research on teaching, reinforcing, and enforcing rules, decide how you would respond to the students in this class. Use the discussion questions to guide your thoughts.

CLASSROOM NARRATIVE

On the first day of school, the teacher established his classroom rules and procedures and posted them on the bulletin board for students to review. He carefully read each rule to the class, explained what it meant and what some of the consequences would be if students didn't follow the rule. The ultimate consequence for disobeying rules was to remove students from the room.

On the second day of school, the teacher began instructing the class. He found that many of the students were not following his rules or procedures despite reminders. By mid-afternoon, he became exasperated feeling as if he'd lost control and began asking students to leave the room when they misbehaved. At this point, three students have already left the room.

DISCUSSION QUESTIONS:

1. What could the teacher have done to gain better control of his class?
2. Do you think using the "ultimate consequence" on the second day of school will influence the students' perceptions of the teacher?
3. How might he have avoided removing students from the room so early in the year?

RESEARCH ON

EFFECTIVE GROUP MANAGEMENT PRACTICES

INTRODUCTION

This is the second research training unit on effective classroom management practices. The findings in this study support those reported in the unit on Effective Classroom Management for the Beginning of the Year. We recommend that this unit be presented after the Beginning of the Year unit as these findings address the issue of maintaining good classroom management once a system is already in place. Together, these two research units offer good strategies and practices for establishing and maintaining a good management system.

The basic concepts presented in this research summary are:

- with-it-ness and overlapping
- smoothness and momentum
- group focus and accountability

Depending on the time available for research training sessions, we recommend that these concepts be presented and discussed with activities together as one 2½-hour session, two 1¾-hour sessions, or three 1-hour sessions. The best grouping arrangement for two sessions is to present and discuss with-it-ness and overlapping and smoothness and momentum together with activities in one session and group focus and accountability along with activities 3 and 4 in a second session. Generally, you should plan to spend 20 to 30 minutes presenting and discussing each concept (e.g., with-it-ness and overlapping) and 15 to 30 minutes working through an activity. Activities 3 and 4 in particular will tend to take the greater recommended time allocation for them. Also plan to spend the last 15 minutes of each session working through the Plan of Action exercise for selecting concepts for classroom implementation.

RESEARCH ON

EFFECTIVE GROUP MANAGEMENT PRACTICES

Jacob Kounin, a noted educational researcher and professor of educational psychology at Wayne State University (Michigan), identified a group of proactive teacher behaviors which distinguished more effective classroom managers from less effective managers. His findings are the result of many years of research on group management techniques.

Initially, Kounin's research focused specifically on teacher desist techniques, or how teachers stopped misbehavior. In an incident involving his own college classroom, Kounin observed that the action he took to stop a misbehaving student (a desist) had a visible effect upon the other students in his class, those who were the actual audience to the event, not the misbehavers. He termed this phenomenon a ripple effect. To understand it more fully, Kounin studied teacher desist techniques in various school settings—kindergarten, camp, elementary school, high school and college—to determine what kinds of ripple effects were produced by various teacher desists and if certain desist techniques were more effective than others in producing more conforming student behavior.

Kounin sought answers to such questions as, do desists influence students' attitudes toward the teacher with respect to strictness or fairness, etc.? Do desists affect students' attitudes toward the deviant student or the deviancy? Does a desist "serve as an example" and restrain behavior in other students? Does a desist cause other students to behave better or to pay more attention to their work or does it actually increase the tendency of other students to misbehave? Which students are affected the most by the teacher's desist—those students who are also engaged in off-task activities or those students who are working on-task? Do certain qualities of teacher desists—clarity, punitiveness, anger, firmness, disapproval, intensity, humor—produce any consistent ripple effects?

The results of his research showed that with one exception the manner in which teachers handled misbehavior made no difference in how audience students reacted. In other words, it was not possible to consistently predict any ripple effect from any quality of a disciplinary event (Kounin, 1970). However, there was some evidence suggesting that punitive desists generate emotional discomfort among audience students.

These findings do not rule out the fact that some teacher desists are effective and others are not. Kounin observed one teacher walk to the light switch, and flick the lights on and off two times as a signal for the children to be quiet and listen to her. It worked. The children immediately stopped talking and faced the teacher attentively. The following day, Kounin observed another teacher in the same school and same grade use the same technique to quiet her students and it didn't work. The children who were talking continued talking and those who were playing around continued playing around. Kounin concluded from this and

other findings that while some teachers were more effective than others in desisting student misbehavior, their effectiveness was not tied so much to the manner in which they handled the misbehavior as it was to some other prevailing dimensions of classroom management.

This led Kounin to a second major study of classroom management in which he videotaped 80 elementary classrooms, grades 1-2 and grades 3-5. He reasoned that the videotapes, which could be played over and over again, would allow him to analyze all the many simultaneous variables in a classroom which may be influencing student behavior. His analysis of the videotapes showed that maintaining high levels of student work involvement was more important to maintaining good classroom management than how a teacher actually handles misbehavior (Kounin, 1970). In effect, the essence of good classroom management lies in establishing conditions which prevent or discourage behavior problems before they occur.

From the videotape studies, Kounin identified the following dimensions of classroom management which were effective in maintaining high levels of student work involvement and minimizing student misbehavior: demonstrating knowledgeability of children's behavior in the classroom; attending to more than one issue simultaneously; managing activity movement; maintaining group focus; and programming learning with variety and intellectual challenge. He termed these group management strategies: **with-it-ness and overlapping, smoothness and momentum, group focus and accountability,** and **progress, variety and challenge arousal.**

WITH-IT-NESS AND OVERLAPPING

With-it-ness is defined as a teacher's ability to communicate to her students that she knows what they are doing in the classroom at all times. In effect, with-it-ness is what a teacher does to give her students the impression that she must have eyes in the back of her head because she sees all and knows all. Teachers who exhibit this ability are more successful in preventing student behavior disruptions in their classes and in keeping students working on their academic tasks than teachers who do not exhibit this ability. If students perceive that the teacher really knows what's going on in the classroom at all times they are less inclined toward misbehavior because there's a fear of getting caught.

The significance of this concept is not simply that the teacher is aware of what's going on in the classroom, but that the **teacher indicates to her students through some action that she is aware of their behavior.** The easiest and most visible way for teachers to send this message to their students is by stopping misbehavior in a timely and appropriate manner. This means nipping problems in the bud before they escalate, catching the right culprit, and handling the more serious of two misbehaviors occurring at the same time.

The timing of the teacher's response to student misbehavior is important because if the teacher fails to stop the misbehavior before it spreads or increases in seriousness, it raises a question in the minds of the students concerning how well the teacher knew what was going on. For example, two children, Lucy and

John, start talking across the table about a class romance. Robert and Jane join in. Jane starts giggling and turns to Mary to whisper something to her. If at this point the teacher says "Jane and Mary, stop talking!", the teacher's desist was too late. Or consider another, more serious example in which timing also influenced the amount of effort the teacher had to use to stop the misbehavior. David walks toward the learning center to use the computer. Mike pushes his way in front of David and beats him to the computer. David pushes Mike out of the way, claiming he was there first. Mike hits back. David hits back. Both boys start fighting. If the teacher had been aware of what was happening, she could have spoken to Mike when he first butted in and prevented a potential major disruption. At this point, the teacher not only would have demonstrated her awareness of student behavior but it would have been relatively easy to desist Mike. Now, the total class has been disrupted and the teacher must stop a fight.

The appropriateness of the teacher's response to misbehavior is equally important because it, too, demonstrates that the teacher is fully aware of the nature of the misbehavior and the target student or culprit responsible for the misbehavior. Target mistakes occur when a teacher catches the wrong student or desists a less serious misbehavior when a more serious one is occurring at the same time. For example, suppose Bob and Bill are teasing Mary while the teacher is busy working with a group of students. Mary finally states in a loud voice, "Stop that, you two!" The teacher tells Mary to go sit alone and ignores the instigators of the incident. Or the teacher observes Johnny and Jimmy talking at a table instead of working on their math assignment. He tells the two to stop talking and get back to work but says nothing to the two boys on the other side of the room who are throwing paper wads at students. If mistakes like these occur often, students begin to get the idea that the teacher is not truly aware of the classroom and that there's a reasonable likelihood they can misbehave unnoticed.

Teachers also exhibit with-it-ness when they call a child's attention to the fact that he or she is using an incorrect prop in class or when they redirect a child who is working problems on the wrong page. These two examples, however do not occur as frequently as do the opportunities for teachers to desist misbehavior and therefore do not provide the same continuous message that the teacher knows what is going on at all times. These examples of teacher with-it-ness are also not as readily perceived by other students in the class.

A teacher's ability to exhibit with-it-ness depends upon how effectively he or she monitors the classroom for cues to student behavior. Whether the teacher is directing small group or whole group instruction or having seatwork, monitoring means periodically scanning the room to assess if students are actively paying attention to the teacher's instruction or engaged in other academic work or simply misbehaving. Such scanning also alerts the teacher to those in-between stages of student behavior when they are neither working or misbehaving but simply off-task. Establishing eye contact with those students, asking them a question during group discussion or giving them some other cue to redirect them to their work can head off student misbehavior before

it occurs.

Evertson, Emmer and Anderson's research on classroom management supports Kounin's findings on teacher with-it-ness. To set clear expectations for student behavior, teachers need to monitor behavior and consistently enforce rules. Establishing good room arrangements facilitates both high visibility for easy monitoring of students and good traffic patterns which reduce student bottlenecks and permit the teacher to freely circulate around the room. Positioning problem students' desks close to the teacher and in areas which can be readily monitored also aid the teacher in maintaining his or her with-it-ness. **Overlapping** is the teacher's ability to effectively handle two classroom events at the same time as opposed to becoming so totally immersed in handling one event that the other one is neglected. Teachers spend most of their day working either in small or whole class groups, and it is not uncommon for a teacher to be interrupted by a student outside the group who needs assistance to complete an assignment or who has just returned from a pull-out program or who is misbehaving. Teachers skilled in overlapping are able to maintain the flow of instruction by holding the group accountable for continuing their work, while at the same time dealing with the intrusion or misbehavior.

Consider the following example of overlapping. A teacher who is leading a small reading group notices that John and Richard are talking loudly in the room instead of doing their seatwork. While listening to Mary read and correcting her mispronunciations, the teacher tries to establish eye contact with the boys to motion them to get back to work. Unable to establish eye contact, the teacher calls on Mike, a good reader, to read the next page. She tells the group she will have a question for them on the page Mike is reading when she gets back. The teacher then quickly and quietly walks to John and Richard. She tells the boys to stop talking and get back to their work. The teacher returns to the reading group and, after Mike is finished reading, asks the group a question. In both attempts to stop the misbehavior in the back of the room, the teacher carefully maintained the instruction within the group by remaining an active part of the group and by holding the students accountable. In a similar situation, a secondary teacher who is leading a whole class discussion notices John and Richard in the back of the room talking instead of listening. The teacher, while directing a question to the class, walks over to the boys and taps their desk lightly to signal to them to stop talking. She immediately calls on David to respond to the question and shifts most of her attention to him in order to provide feedback to his response.

In contrast to the above two examples of overlapping, consider a different classroom event. The teacher is with a reading group and Betty is reading aloud. Gary and Bob are sitting at their desks poking each other. The teacher sees Gary and Bob, gets up, walks away from the reading group and over to the boys, and angrily says, "I want this nonsense stopped! Right now! Both of you get busy on your assignments." In this situation the teacher became so totally involved in desisting Gary and Bob that she neglected the reading group and left them dangling without any instructions to guide their behavior during the desist. A similar situation

arises when teachers become so immersed in helping one child with a learning problem that they fail to monitor the rest of the class or generally make themselves available for assistance to the rest of the class. Or consider what frequently happens when the principal comes to the door. Some teachers become so intent on learning what the principal wants that they immediately stop what they're doing to meet with him. They are no longer monitoring the class and the students are left without a task or direction to hold them accountable during their teacher's absence. A teacher skilled in overlapping might give the students a short assignment or a direction to continue working before meeting with the principal and when possible keep an eye or ear tuned into the class to monitor their behavior.

Overlapping is an important group management technique. Coupled with with-it-ness, it helps to maintain high levels of student work involvement and to discourage deviant behavior. If students perceive that the teacher is aware of their actions and capable of dealing with them, they are more likely to cooperate and stay on task.

SMOOTHNESS AND MOMENTUM

A teacher's ability to manage smooth transitions between learning activities and to maintain momentum throughout the lesson and the day is one of the most important behavior management techniques for sustaining student work involvement and the teacher's control of the classroom. Whether teaching whole groups or small groups, effective managers are well prepared and thus able to conduct smooth, well paced lessons that move briskly. In general, all materials and props needed for lessons are ready and easily accessible so that there are few unnecessary interruptions associated with tracking down materials. Effective teachers know what to do next so that there is no need to stop and consult the teacher's manual, no false starts and no backtracking to present information that should have been presented earlier.

SMOOTHNESS

Effective classroom managers conduct good transitions, moving quickly and smoothly from one activity to the next. These teachers have good routines for moving between activities and use signals and cues to focus students' attention throughout transitions.

Less effective teachers are not able to maintain this same smooth, seemingly automatic flow of activities. Instead, their transitions are jerky, frequently losing students' attention. Kounin identified five types of teacher behaviors which cause transitions to be jerky: thrusts, dangles, truncations, flip-flops and stimulus-bounded events. (While this terminology is not essential to the classroom teacher, the behavior patterns associated with jerkiness are important.)

A **thrust** occurs when the teacher suddenly bursts in on the students' activities with a new statement or direction and the students are not ready to receive the teacher's message. For example, the teacher is working with the Red Group at the reading circle. John has just finished reading aloud. The teacher closes her book and says, "That's good John. Now all of you go back to your desks and finish your seatwork." She im-

mediately stands and says, "Blue Group, it's your turn to come to the reading circle now." Half of the Blue Group hear the teacher's call and start to put away their materials. The other half are still working at their seats. In this example, the teacher interrupted the Blue Group's seatwork without first checking to see if they were ready to receive her direction. A more effective process might have been for the teacher to first wait a few seconds to allow the Red Group to return to their desks to signal the Blue Group that they soon would be called.

A **dangle** is when the teacher leaves one activity "dangling" in mid-air to start another activity and then returns to the first activity. For example, a chemistry teacher begins the class by going over the homework assignment. The teacher asks three students to go to the board and write the chemical equations for the first three problems from the homework. On their way to the board, the teacher asks, "How many of you are ready to write your conclusions from yesterday's experiment?" The teacher counts the number of raised hands and jots it down. The class is distracted from the homework and many students are talking about their lab results. One student at the board is not sure if the teacher counted her. It's now difficult for the teacher to refocus the class's attention on the homework.

A **truncation** is a variation of a dangle except that the teacher never returns to the first activity or returns considerably later. A civics teacher asks the class to get out their homework assignment. As they begin he asks, "Have we gone over the rules and procedures for going on our field trip tomorrow? No? Oh dear, we should do that right now." Homework is forgotten, left dangling in mid-air.

A **flip-flop**, another variation of a dangle, happens when the teacher terminates one activity, starts another, and does something to return to the first activity. For example, a teacher tells the class to put away their spelling papers, take out their arithmetic books, and turn to page 23. After most of the class have turned to the right page, the teacher says, "Let's see the hands of those of you who got all their spelling words right. Terrific! You're all doing so well. Okay class, today we're going to review subtraction..."

A **stimulus-bounded event** is a situation in which the teacher interrupts the flow of an instructional activity to respond to an irrelevant event or one which could have been handled just as effectively later on after the learning activity is over. For example, a French teacher is reviewing a vocabularly assignment with the class. She slowly walks down a row, looking at students' work as she explains masculine and feminine articles. She happens to look on the floor and notices a paper bag. She picks the bag up and turns to Mary saying, "What is your lunch bag doing here? You know you're supposed to keep your lunch bag in your locker. Now go put it away." After looking around the entire floor and writing Mary a hall pass, she resumes her review of the assignment which Mary misses since she's out of the room. Or, the teacher is explaining an arithmetic problem at the board while working the answer. The teacher suddenly walks over to Jimmy and says, "Jimmy sit up straight. How can you pay attention and write well when you're slouching like that? Now sit up

straight." He then walks back to the blackboard and begins working the next problem with the class. In both of these examples, the teacher interrupts the flow of activities in the class to call attention to one child for a problem that does not need to be attended to immediately. More effective teachers selectively ignore certain minor misbehaviors which they know can just as effectively be handled after a learning activity is completed in order to avoid interrupting their instruction.

MOMENTUM

Effective classroom managers maintain momentum or a steady sense of movement throughout their lessons and throughout the day. They conduct their lessons at a brisk pace, providing a continuous academic signal for students to focus upon. In contrast, less effective managers are troubled by slowdowns—delays and wasted time between activities which cause students to lose interest. Kounin identified two types of teacher behaviors which impede the progress of a lesson or cause slowdowns: overdwelling and fragmentation.

Overdwelling is spending more time on an issue such as student behavior or task performance than is necessary for the student's understanding. It may be spending too much time giving elaborate directions and long, drawn-out explanations or it may be lecturing about student behavior. A listener's response to teacher overdwelling might be, "All right, all right, enough already. I understand." Some specific examples of overdwelling follow.

In response to Richard's talking in class, the teacher not only tells Richard to stop talking, but interrupts the flow of the lesson to lecture the class about talking saying, "Now you all know this is not a playground. This is a classroom and we're supposed to be learning. We have rules governing student talk and the rules say you are not to talk when I talk and when we are all busy working, you are supposed to be quiet. Quiet means whisper so you don't disturb others who are working. Now let's all be good classroom citizens by following the rules and not disturbing others (Kounin, 1977)." Such lecturing usually turns students off and they begin thinking about something else while the teacher talks. Considerable learning time is wasted.

During a recitation setting, the students are at the reading circle taking turns reading. It's Mary's turn and she begins reading. The teacher interrupts her to tell her she could read better if she stood or sat up straight, held her head up, faced the other children, and held her book properly. The teacher then demonstrates what she means to Mary and to the rest of the reading group. Before allowing Mary to resume reading, the teacher directs the group to sit up straight so they can be good listeners. Finally, the teacher says, "All right, I guess we're all ready. So, Mary please continue." The teacher has drawn the students' attention away from the reading and the story and focused it on procedural details. This has slowed the activity and caused the students to lose sight of the main focus of the lesson.

In another situation, the teacher is explaining to the class how to add by twos to prepare them for a seat assignment. The teacher has the class call out in unison all the odd numbers as she points to them on a number chart, beginning with 1 and continuing through 99. By the time the

teacher finishes the activity, many of the students have lost interest because they feel they already understand the process and the activity is too repetitive. Overdwelling, in general, causes students to lose interest in the main idea of the activity. To avoid overdwelling, more effective managers consider the appropriateness of their actions or activities with respect to the main academic focus and practice giving the minimum amount of instructions necessary for their lessons.

The other major type of slowdown, **fragmentation,** occurs when a teacher breaks down an activity into several unnecessary steps when the activity could have best been performed as a single activity. A common example might be when the teacher has the students turn in their assignments individually rather than collect them by tables or rows. This procedure wastes time and generates considerable confusion as students gather around the teacher's desk. Fragmentation also occurs when a teacher, directing her class to put away their spelling books and materials and take out their arithmetic workbooks, actually coaches the students through the entire process step by step—"close your books, put them in your desks, take out your math workbooks, now turn to page...." Or consider the science teacher who has the class collect the materials for their experiments systematically by rows. "Row one may get up and get their beakers. Row two may get theirs. Now row three. Now row one may line up to put some salt in their beakers. Now two may follow," and so forth until each row has salt and water (Charles, 1981). This process leaves most of the class sitting at their desks doing nothing. A better process might be to have each row move in rotation from one supply table to another so that more than one row is getting their supplies at one time or have a member of each row go to the supply table at the same time to get all of one supply for their row. Involving as many students as possible in an activity helps to focus their attention and keep them invovled. It also reduces the possibility of misbehavior stemming from boredom.

Keep in mind that these types of slowdowns represent common behavior patterns of less effective teachers. That is to say, effective teachers may exhibit these patterns occasionally, but ineffective teachers exhibit them frequently. Furthermore, these patterns occur well after the school climate has been established. For instance, overdwelling and fragmentation to some degree might be present at the beginning of the year in order for teachers to teach rules and procedures to students and reinforce them.

In general, students tend to be attentive when they have a clear, continuous academic signal to attend to. Managing smooth transitions between activities and maintaining momentum are key to establishing this continuous signal. In fact, Kounin found that maintaining momentum throughout a lesson and the day was the single most successful behavior management technique for promoting work involvement and minimizing behavior disruptions. Movement management was even more significant in controlling behavior than techniques of deviancy management per se. In short, without a continuous academic signal or task to focus upon, students tend toward misbehavior and such problems escalate in frequency and intensity the more often students are left without a signal.

GROUP FOCUS

Classroom teachers are charged with the responsibility of teaching large numbers of students at one time and in one room or space. They are not simply tutors responsible for only one child at one time. Typically, teachers teach students either as a whole class or as several small groups working concurrently. Kounin found that a teacher's ability to maintain group focus, i.e. keep students on their toes and actively involved in learning, and to hold students accountable for their work is essential to good classroom management. This finding is supported by another study conducted by Wilford Weber (1981). Weber identified a variable similar to group focus, group cohesiveness, as one of ten techniques selected by teachers successful in maintaining an effective classroom environment. Kounin studied three aspects of group focus: format, group alerting and accountability.

GROUP FORMAT

Typically, within any recitation setting, there are performing students—those students who are reading aloud, responding to a teacher's question or demonstrating a skill—and non-performing students. Group format refers to the degree to which the organization or formal set-up of a learning activity has been programmed to actively involve the non-performers as well as the performers. Kounin identified a range of formats from high to moderate to low participation. An optimal or high participation format is one in which all the students in the class are required to perform individually at the same time. For example, an elementary teacher asks her students to locate the number card at their desks which answers the question, "How much is eight plus four?" After everyone has selected a card, the teacher has the students raise their cards simultaneously on a cue; she then provides feedback. Another example would be having students work a geometry problem at their desks while others work it at the board. The teacher then compares the answers of the students at their desks to those at the board through a show of hands. A moderate participation format is one in which children in a reading group are asked to read along silently while another student reads aloud, knowing that they will be asked to locate some word, picture or event after the reading. Programming lessons for a moderate to high degree of student participation is an effective behavior management technique because it helps to eliminate dead time for non-performers and keeps them actively involved in the learning. However, Kounin found that the activity format per se—the organization, the props students used—in and of itself did not affect student work involvement. Rather, it was how the teacher conducted the lesson to hold the group's focus and to hold them accountable for their work which was instrumental to maintaining student work involvement.

GROUP ALERTING

Group alerting is what a teacher does to grab the attention of all the students in a group and keep it continuously focused on the learning activity. This teacher skill is key to maintaining high levels of student work involvement (or time on task—See Time on Task research) especially during recitation settings and to prevent student off-task behavior. Kounin identified the following group

alerting or high interest techniques used by more effective teachers to hold students' attention and otherwise keep them on their toes:

1. Attracting students' attention by asking a question before calling on a student to respond.

2. Holding attention by pausing to look around the group to bring the students in before calling on someone to respond or recite, by asking for a show of hands before selecting someone, or by using other high interest cues such as saying "Let's put on our thinking caps, this one might fool you," before selecting a student (elementary).

3. Keeping students in suspense as to who will be called upon next by avoiding a predictable pattern for selecting students.*

4. Calling on different students with sufficient frequency so that students don't tune out because the same group is always called upon.

5. Interspersing individual responses with mass unison responses.

6. Alerting non-performing students in a group that they may be called upon in connection with the performer's response or to recall something the performer recited.

Kounin also identified some common teacher practices which reduce student attention levels, particularly among non-performing students. **Less effective teachers do the following too often:**

1. Focus on one student at a time, shifting their attention away from the group and to the performing student only.

2. Choose a student to respond before asking the question, causing the other students to lose interest because they know they don't have to respond.

3. Select students in a predictable pattern or sequence, such as clockwise around a circle, or by rows, so that students are free to focus their attention elsewhere until it is their turn to respond.

ACCOUNTABILITY

Accountability is simply holding students accountable for doing their work. If students know that their teacher expects them to do their work, will always check to see that they did it, and will provide feedback regarding their performance, they are more inclined to remain academically involved and on-task and to complete their work. In a recitation activity, accountability is a specific group management practice which ensures the academic involvement of non-performing students as well as performing students. Some specific techniques for holding non-performing students accountable during recitation activities follow (Note that many of these are the same for group alerting):

1. Teacher checks students' answers or other performances by asking them to hold up their cards or other props.

*NOTE: Kounin actually argues for a random selection of students (turn-takers) to respond to keep students alert. However, Jere Brophy has produced research advocating ordered turn-taking. Briefly, Brophy has found that with totally random selection, teachers frequently miss certain students in their class—those they subconsciously don't want to have to deal with (chronic misbehavers or the generally unsuccessful) or those in a particular part of the room as in the teacher who consistently missed students in the first row because she unknowingly looked directly beyond them. Brophy concludes that the benefit of creating suspense through random selection is far less than the liability created when all students are not given a fair and equal chance to interact directly with the teacher. A strategy which draws upon the merits of both random selection and ordered turntaking is to call upon students in some systematic pattern which allows the teacher to interact with all students and yet is not recognizable to the students, such as, calling on students randomly while recording it on a seating chart so the teacher can readily determine which students haven't had an opportunity to respond.

2. Teacher requires group to recite in unison while actively listening for individual responses.

3. Teacher checks for understanding of a larger number of students by asking some students to comment on whether another student's performance was right or wrong. ("Mike, watch Linda do the problem at the board and tell me if it's right.")

4. Teacher circulates around the group and checks the answers or performance of students at their seats while another student is asked to perform aloud or at the board.

5. Teacher asks for the raised hands of students who are prepared to demonstrate a skill or problem and then requires some of them to demonstrate it.

AVOIDING SATIATION

Satiation means becoming bored, or coming to dislike an activity because one's had enough of it. This term describes a classroom phenomenon in which there is a noticeable change in the dynamics of an activity due to repetition. Specifically, Kounin found that repetition of an activity often causes less work involvement in and liking for an activity (Charles, 1981). As students perceive that an activity is becoming increasingly repetitious they become less involved in it and exhibit more off-task behaviors such as looking out the window or around the room, daydreaming, tying shoes, talking to a neighbor, reading a newspaper or "good" book, etc. In effect, students begin looking for something more stimulating to do.

As satiation increases, the quality of student work decreases because students become even less involved and more careless. Students begin performing their work mechanically which often leads to a "breakdown" in the activity. Either because they want to invest as little energy as possible in the activity or in an effort to add some variety to the task, students breakdown an activity into a series of meaningless steps. For example, students made to write multiplication facts (say the 7s tables) for the "umteenth time" may start by writing a series of 7s down their paper, followed by a series of Xs next to the 7s, followed by a listing of the factors, followed by a series of = signs and so forth rather than write each multiplication equation separately. Often in this process it becomes apparent that students have lost the meaning of the activity or the concept being learned since they are no longer writing a series of multiplication equations but rather a listing of numbers and mathematical signs.

PROGRESS

Kounin identified three instructionally related qualities—progress, valence and challenge arousal, and variety—which when present help to reduce the level of satiation in classrooms. The most important element influencing the rate of satiation is a sense of progress. Students who feel they are making definite progress either don't become satiated or take considerably longer to become satiated. In contrast, students who are forced to do the same thing over and over have a sense of not getting anywhere and are quickly satiated. In looking for specific positive cues which teachers might use to help create a feeling of progress or accomplishment such as building on a previous day's work, "Yesterday we learned...now we're going to see if we can...," or pointing out some real improvement, "You got two more problems right today than you did

yesterday." Kounin found that there were very few instances in which teachers did anything special to create a sense of progress; yet, feeling a sense of progress is crucial to slowing the rate of satiation especially for older students. This concept of progress can also be linked to the concept of success rate in the teaching effectiveness research. The findings on success rate suggest that students learn more when they are given new instruction at a brisk pace and at a difficulty level which they can master readily. This mode of instruction would not only insure a high success rate (which the research says is most effective) but also a sense of progress which leads to greater work involvement.

Kounin also looked at the length of activities in a school day as a dimension of progress. He found that programming the length of an activity to take into consideration student attention spans was not a significant factor in maintaining high levels of student work involvement. That is to say the length of an activity per se did not affect student attention.

VALENCE AND CHALLENGE AROUSAL

Valence and challenge arousal refer to the specific techniques teachers use to "psych up" students for the next academic activity—get them more involved in, curious or enthusiastic about it. Such techniques include the teacher showing genuine zest or enthusiasm for the activity; making motivational comments like, "This one is going to be fun, I know you'll enjoy it;" or delivering a special challenge as in, "You're going to need your thinking caps for the next one, it's tricky." As a technique for reducing satiation and maintaining student work involvement, Kounin found valence and challenge arousal to be somewhat successful.

VARIETY

Programming variety into learning activities and the school day plays a significant role in reducing satiation. Kounin found that early elementary students, in particular, need variety to hold their attention and keep them from losing interest. By variety, Kounin means designing a day or week with sufficiently different learning activities so as to limit the amount of time students spend working on the same type of activity.

To add spice to the day, teachers can vary the academic content or subject between activities perhaps starting with a quiet reading period, followed by an active physical education session, followed by a math session and then a spelling game. Teachers can also vary the group configuration of an activity by using a small group format, a whole class format or by having students shift from one subgroup to another across activities. The type and level of intellectual function required by a task can also vary. Some activities might require students to simply listen or copy something down. Others might require students to practice a skill as in oral reading, or demonstrate their comprehension as in recalling part of a story, or answering questions orally or in writing. Still other activities might require abstract thinking or creative expression. Teachers can also vary the props used in a lesson as well as the way they present. They can demonstrate, direct an activity, lead a discussion, participate along with students, circulate among stu-

dents and observe students. All these techniques can combine to create variety among activities to reduce satiation.

While older students benefit from variety, Kounin found that they did not need as much of it as younger students. These students seemed to benefit more by working on the same activity for a longer period of time or at least for a sufficient length of time which would allow them to experience mastery of the activity. Having a sense of progress and accomplishment was more important for reducing satiation among older students than was experiencing variety.

Kounin also found that variety was more critical during seatwork activities than during recitation activities. In fact, programmed variety during seatwork activities was the single most important management technique for maintaining high levels of student work involvement. In contrast the other group management techniques presented earlier were far more important to maintaining student attention during recitation activities.

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RESEARCH ON

EFFECTIVE GROUP MANAGEMENT PRACTICES

REVIEW OF CONCEPTS

Jacob Kounin in **Discipline and Group Management in Classrooms** (Holt, Rinehart and Winston, NY, 1970) identified the following teacher behavior patterns associated with more effective classroom management as evidenced by greater student time spent on learning activities and less student misbehavior.

With-it-ness is a teacher's ability to communicate to her students that she knows what they are doing in the classroom at all times. In effect, it's what a teacher does to give her students the impression that she has eyes in the back of her head. The easiest and most visible way for teachers to let their students know they are "with-it" is by nipping behavior problems in the bud before they escalate, catching the right culprit, and stopping the more serious of two simultaneous misbehaviors first.

Overlapping is the teacher's ability to effectively handle two classroom events at the same time as opposed to becoming so totally glued to one event that the other is neglected. Teachers frequently encounter such problems as having to deal with a student who needs assistance completing an assignment or who has just returned from a pull-out program, while trying to work with a small group of students or having to deal with a misbehavior such as student-talking or a student reading a newspaper while trying to lead a whole class discussion. Teachers skilled in overlapping are able to maintain the flow of their instruction or otherwise hold students accountable for their work while at the same time effectively dealing with the interruption.

Smoothness is a teacher's ability to manage smooth transitions between learning activities. It involves having good transition routines; using signals as cues to prepare students for transitions and clearly ending one activity before moving on to another. Smoothness also involves selectively ignoring certain minor misbehaviors which can be handled just as effectively after a learning activity in order to avoid interrupting the instruction.

Momentum is the ability to maintain a steady sense of movement or progress throughout a lesson or the day. Teachers skilled in momentum conduct their lessons at a brisk pace, providing a continuous academic signal or tasks for students to focus upon. They avoid any behavior which may slow down a lesson or lose students' interest such as giving long drawn out directions or explanations, lecturing on student behavior or breaking activities down into steps which are too small.

Group Focus and Accountability refers to a teacher's ability to keep the whole class or group of students "on their toes" and involved in learning

by structuring activities so that all students, both non-performing and performing (reading aloud, answering a question) are actively participating;

by holding students accountable for doing their work; and by creating suspense or other high interest techniques for holding students' attention

DIRECTIONS FOR TRAINERS

1

Training Activity
for
GROUP MANAGEMENT RESEARCH

TITLE: "Ego-Tripping on With-it-ness"

OBJECTIVES: To understand what it means to be "with-it" and to identify specific teacher techniques which lead to greater with-it-ness

PROCESS: Group Discussion

FORMAT: Large Group

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read the entire activity and jot down (if time permits) their thoughts to the questions on the last page of the activity. Ask the teachers to share their responses with the group. Encourage teachers to look for cues as to how they can become more "with-it" by understanding their moments of good and poor "with-it-ness." Bring out the importance of monitoring student behavior at all times and ask for specific techniques or strategies which can make this process easier for teachers. Some examples might be: checking more frequently those parts of the room in which you anticipate more off-task behavior or misbehavior occurring; positioning "problem" students nearest to you so they can quickly and readily be monitored; establishing a good room arrangement which eliminates "blind spots" and permits easy monitoring by the teacher; keeping your desk relatively clear so that if you have work to do you can readily glance up and check on students; circulating around the room especially during seatwork; etc.

A "Quickie" Activity

Ego-Tripping on "With-it-ness"

(A picture story)

"I" am the Captain of the Good Ship "With-it-ness". Among my many competencies is my unwavering ability to use the "eyes" that are carefully concealed in the back of my head. My ship runs smoothly. Every crewperson and (crudeperson) is "on-task". "I" know it... they know it... and they know that "I" know it.

"Aye-Aye," Sir/Ma'm!

Kaye Smith

***A good captain utilizes the crew to its fullest potential. Each person has a job to do; has been given instructions on how to do the job; knows where and when to perform his duties; and fully expects that the captain will check to see that it's well done.**

YOUR CHORE

Reviewing Kounin's Definitions:

1. **With-it-ness**—letting your students know that you are aware of everything that is going on in the classroom.
2. **Overlapping**—dealing with two simultaneously occurring classroom events.

Consider these questions in light of your present situation.

1) During which classroom activities do you feel "with-it"; in other words, your students perceive you as knowing what's going on in the classroom?
2) During which classroom activities are you most likely in need of your with-it-ness and overlapping skills?
3) Are there any class periods or certain times of the day when your "with-it-ness" wilts?
4) Can you identify a student, a group, or an area of the room, that needs more specific attention than others during independent activities?

Having considered the previous questions, now respond to the following:

I. I am really "with-it" when...

II. I don't think I'm with-it when...

III. I can get "with-it" by...

Please share some of your discoveries with the group.

DIRECTIONS FOR TRAINERS

2

Training Activity
for
GROUP MANAGEMENT RESEARCH

TITLE: "Keeping It Smooth"

OBJECTIVES: To recognize those teacher behaviors which can lead to a breakdown in instructional activities

PROCESS: Group Discussion

RECOMMENDED TIME ALLOTMENT: 15-30 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read the entire activity. Then ask teachers to share their assessments of each Roman numeraled situation with the group. Where discussants indicate a breakdown in the activity teacher's instructional process, have them identify how the teacher could have better managed the situation. Also encourage the discussants to talk about how and at what point the teacher might have regained the focus and momentum of the activity.

Note: An annotated activity, the Trainer's Copy, is provided to assist the trainer in leading a group discussion.

Trainer's Copy

"KEEPING IT SMOOTH"

Training Activity
on
Group Management Research

Read the following classroom scenario. Identify those situations in which the teacher seems to be running the class smoothly. Also identify those situations in which the teacher's smoothness and momentum seem to break down. Make specific suggestions as to how the teacher could have better managed those situations using good group management techniques.

	CLASSROOM NARRATIVE	TRAINER'S NOTES
I	It is the first period of the day. The students are in their assigned seats and have just completed their opening exercises which include: taking attendance, collecting lunch money, etc.	Class is running smoothly.
II	Next, the teacher instructs the class to go quietly and directly to the "Discussion Corner" so that they can share the experiences they had on the trip they took on the previous day. As the students are moving to the Discussion Corner, the teacher remembers that they had homework, which was a writing assignment about their trip. She announces "Before you go to the discussion corner, turn in your homework."	Lesson on smoothness and momentum are interrupted by a **dangle.** Teacher creates a false start by asking for the students' homework after they already begin to follow her first direction to move to the Discussion Corner.
III	Most of the students in the class manage to get back to their desks, rummage through and find their homework assignments. Since they had received no instruction as to where to put the assignments, the students begin to crowd around the teacher in an effort to place the papers in her hands. Those students who didn't do the homework simply proceed to the Discussion Corner.	Teacher's dangle creates confusion and disorderly behavior. Problem is compounded by a lack of specific directions regarding how or where to turn in the homework assignments. Teacher could have regained the lesson **smoothness** and **momentum** by grabbing the students' attention, refocusing it and giving clear, specific directions. Confusion and misbehavior intensify.

IV	Other students who manage to give their papers to the teacher join the "no homework" group at the Discussion Corner. Some of them seize upon the moment of confusion and begin to roll around on the carpet.	
V	The teacher notices the misbehavior in the Discussion Corner and promptly marches over to reprimand those students who are acting out, leaving the other students in the vicinity of her desk and other parts of the room.	The teacher exhibits **with-it-ness** by immediately attending to the misbehavior, However, she fails to **overlap** by giving the students who are trying to turn in their papers any direction to hold them accountable before dealing with the misbehavior. Students who are left without any teacher direction exhibit confused behavior.
VI	Those students who had not been successful in giving their papers to the teacher are not sure about what they should do next, so some of them place the papers in different areas on her desk; some hold on to their papers; and some of the papers fall to the floor.	
VII	After the entire class has assembled in the Discussion Corner, the teacher states "Before we talk about our trip experiences, I think we should discuss the way we behaved during the last five minutes. Jimmy, you were the silliest, you talk first....and if ever you behave like that again, I'll send for your parents..."	While the teacher needs to regain the group's focus and give feedback about the students' poor behavior, her reprimand of Jimmy is not very effective and borders on **overdwelling**. Teacher could discuss the past five minutes in a more constructive manner, especially since her lack of smoothness precipitated the events.

"KEEPING IT SMOOTH"
Training Activity
on
Group Management Research

Read the following classroom scenario. Identify those situations in which the teacher seems to be running the class smoothly. Also identify those situations in which the teacher's smoothness and momentum seem to break down. Make specific suggestions as to how the teacher could have better managed those situations using good group management techniques.

CLASSROOM NARRATIVE:

I It is the first period of the day. The students are in their assigned seats and have just completed their opening exercises which include taking attendance, collecting lunch money, etc.

II The teacher instructs the class to go quietly and directly to the "Discussion Corner" so that they can share the experiences they had on the trip they took the previous day. As the students are moving to the Discussion Corner, the teacher remembers that they had homework, which was a writing assignment about their trip. She announces "Before you come to the discussion corner, turn in your homework."

III Most of the students in the class manage to get back to their desks, rummage through and find their homework assignments. Since the teacher gave no instructions as to where to put the assignments, the students begin to crowd around the teacher in an effort to place the papers in her hands. Those students who didn't do the homework simply proceed to the Discussion Corner.

IV Other students who manage to give their papers to the teacher join the "no homework" group at the Discussion Corner. Some of them seize upon the moment of confusion and begin to roll around on the carpet.

V The teacher notices the misbehavior in the Discussion Corner and promptly marches over to reprimand those students who are acting out, leaving the other students in the vicinity of her desk and other parts of the room.

VI Those students who had not been successful in giving their papers to the teacher are not sure about what they should do next, so some of them place the papers in different areas on her desk, some hold on to their papers, and some of the papers fall to the floor.

VII After the entire class has assembled in the Discussion Corner, the teacher states "Before we talk about our trip experiences, I think we should discuss the way we behaved during the last 5 minutes. Jimmy you were the silliest, you talk first... and if ever you behave like that again, I'll send for your parents...."

DIRECTIONS FOR TRAINERS

3

Training Activity for GROUP MANAGEMENT RESEARCH

TITLE: "With-it-ness in Action"

OBJECTIVES: To identify effective desist techniques and specific teacher behaviors which demonstrate with-it-ness and overlapping

PROCESS: Roleplay or Group Discussion

FORMAT: Small or Large Groups

RECOMMENDED TIME ALLOTMENT: Roleplay 45 minutes/Group Discussion 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants. If the activity is to be roleplayed, determine whether the participants need a description of the scenarios (see Roleplay direction). If the activity is to be used to stimulate group discussion, reproduce the necessary number of worksheets to focus participants' ideas.

DIRECTIONS: There are several options available to you for leading this activity. Participants can either roleplay the scenarios or discuss them as a group. A decision regarding the appropriate format should either be made ahead of time or you should use your best "sense of audience" to determine which format is most suited to the group's mood. Roleplay can be particularly stimulating because it provides for physical movement and teachers enjoy acting out, especially after a long day; however, sometimes the numbers and the momentum of the group suggest group discussion may be best.

Roleplaying: As the activity leader, you can control the amount of information the actors have regarding their parts. For example, you can decide that the participant who plays the role of the teacher should have a full

understanding of the scenario he or she is to respond to, including the problem student's part, thus eliminating any anxiety. In this situation, supply the actors with a copy of the classroom narrative **and** the scenario. Or you can decide to have the participant playing the role of teacher respond to the classroom disturbance spontaneously. In this situation, supply all actors with a copy of the classroom narrative only. Privately explain to the selected actors their roles of "teacher" and "problem student," being careful to give the "teacher" minimal information. For example, in scenarios I and II, simply explain to the "teacher" that there are two other groups functioning. Let the "teacher" discover the disruption for him or herself. Or in scenario III, simply explain that an LD student is out of the classroom. (Note: The participants need not be divided into three groups. Two groups—the teacher directed group and the problem group are sufficient.)

Encourage group discussion of the roleplay. Focus upon the "teacher's" desist techniques and his or her specific behaviors which reinforce the concepts of with-it-ness and overlapping. Use discussion questions as a guide.

Group Discussion: Have the participants read through the entire activity, including the scenarios. Select one or more scenarios for the participants to respond to. Have the participants complete the worksheet before discussing their strategies or have them use it as a reference throughout the discussion. Encourage the participants to share their desist techniques and multiple strategies for managing the scenarios. Reinforce their with-it-ness and overlapping behaviors. Use the discussion questions as a guide.

DISCUSSION QUESTIONS:

1. What action did the teacher take to control the interruption?
   Was it effective and why? Was he or she "with-it"?
2. Are there circumstances in which the approach might not be as effective?
3. What provisions did the teacher make to insure that the other groups continue functioning while he or she attended to the disruption?
4. What other strategies for managing the situation can be used?

"WITH-IT-NESS IN ACTION"

Training Activity for Group Management Research

Read the following classroom scenarios involving a typical learning period in which the teacher is managing several instructional groups simultaneously. Choose one or more of the scenarios and decide how you would respond to the behavior disruption using your with-it-ness and overlapping skills and your most effective desist techniques. Keep in mind the concept of accountability, also identified by the Kounin research.

CLASSROOM NARRATIVE

There are three groups functioning simultaneously in the classroom—a reading group directed by the teacher, an independent vocabulary group and an independent research group. (Other academic activity groups could be substituted.) One child is out of the classroom for L.D. instruction. The teacher has already given clear, specific directions to both the vocabulary group and the research group regarding their assignments. She has also reminded the groups about working "quietly" which means soft whispers are allowed.

The vocabulary group is working individually on crossword puzzles. They have dictionaries and other reference books at their table to help them with their assignment.

The research group is answering questions about an independent reading assignment. The questions are written on the chalkboard and the students are grouped around the board, writing the answers to the questions in their notebooks.

The teacher is leading a group discussion on the main ideas developed in the chapter the reading group has just finished reading aloud.

Scenario I

One student in the vocabulary group decides that she needs a thesaurus to find a special word for her crossword puzzle. She doesn't see one among the reference books. She also doesn't wish to disturb the teacher so she gets up and begins wandering around the room in search of the thesaurus.

The teacher looks up from the reading group and....

Scenario II

One student in the research group has become bored with the assignment and decides to liven up the group. She moves to the chalkboard and draws a funny face on the board, labeling it "teacher." The research group begins to giggle. The student, inspired by the attention, adds more to the picture. The group starts to laugh louder.

The teacher hearing the laughter looks up, scans the room, notices the class clown at the board and....

OR (The teacher doesn't yet notice the disturbance.) Other students in the group join in the fun and begin scribbling on the board, adding their own interpretations to the teacher's picture. The group now has the attention of the whole class which is watching the entertainment.

The teacher notices the "turned" heads and keys in on the noise coming from the research group. The teacher goes into action....

(Respond to one or both situations. Distinguish between those steps you might take in the first situation where you have caught the problem early and only one student is misbehaving and a few are off-task versus the second situation in which the disruption has been noticed much later—several students are misbehaving and the whole class is off-task.)

Scenario III

The L.D. student, who attends a regularly scheduled pull-out program, has been made to wait alone in the tutoring room for some time only to find out his special education teacher will be unable to meet with him today. Frustrated and angry he returns to his regular class. He arrives unexpectedly and visibly upset. He slams the door, bumps into other students and their desks, and mumbles loudly to himself.

The teacher looks up surprised and....

"WITH-IT-NESS IN ACTION"

Worksheet
for
Group Discussion/Written Activity Format

1. Check the classroom scenario on which you focused.
   - ☐ Scenario I: the student from the vocabulary group looking for the thesaurus
   - ☐ Scenario II: the class clown(s) in the research group
   - ☐ Scenario III: the unexpected L.D. student who returns to class
2. Explain the group management strategies you recommend for dealing with that scenario.

3. Describe how these strategies are supported by the Kounin research. Please identify specific research concepts.

Share your strategies with the group. Discuss alternative strategies.

DIRECTIONS FOR TRAINERS

4

Training Activity
for
GROUP MANAGEMENT RESEARCH

TITLE: "Putting It All Together"

OBJECTIVES: To link the findings from the Beginning of the Year Classroom Management research regarding room arrangement, setting clear expectations, having good procedures, and reinforcing expectations with the findings from the Group Management research

PROCESS: Brainstorm/Group Discussion

FORMAT: Large Group

RECOMMENDED TIME ALLOTMENT: 30-45 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read the entire activity. Ask them to brainstorm all the things they would have to consider within each of the three aspects of grouping in order to make sure their groups operate smoothly. Use the following flow chart as a guideline to the points that should be covered in the brainstorm. Encourage teachers to highlight differences in grouping preparations which may be based on the reason for the grouping pattern. An example might be procedures for seeking the teacher's help if students are ability grouped or if the teacher is actively leading one group.

Hint: To reinforce the ideas shared, you may want to reproduce the brainstorm schemata on a board filling in the ideas generated around the appropriate grouping aspect, or in some other way, record the ideas generated on a board or tabloid.

Trainer's Copy

"PUTTING IT ALL TOGETHER"

Flow Chart for Trainers

Brainstorm

I. Forming Groups
- room arrangement—types of grouping possible
- procedures for moving into groups - permanent groups
  - ad hoc groups
- general rules governing behavior in groups, i.e., talking, getting teacher's attention
- procedures for creating group - task oriented/teacher defined
  - student choice
  - count off
- appropriateness of task for groups—difficulty and independence level

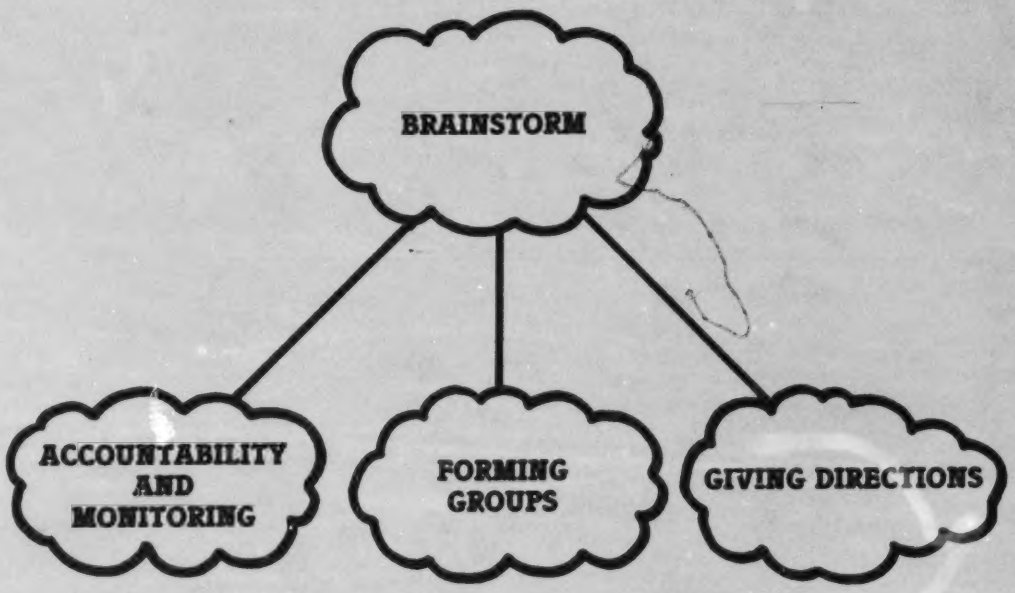
II. Giving Directions
- clear concise explanation of academic task
- how and where to get materials or supplies
- what to do when students complete task—supplemental or enrichment activities
- how to get teacher's attention—when there is/is not a teacher directed group functioning simultaneously
- when to give directions—within groups or for all groups at once
- reinforcement—written directions on board or ditto to supplement teacher directions
- checking for understanding

III. Accountability and Monitoring
- expectations for work completion—feedback
- if teacher is/is not also actively leading a group

"PUTTING IT ALL TOGETHER"

Training Activity for Group Management Research

Teachers frequently use small, simultaneously functioning groups for various instructional periods or activities. These groups may be formulated based on student ability, student choice, the design of the activity, team learning strategies, etc. The findings from the Beginning of the Year Classroom Management research and the Group Management research are both related and mutually supportive. Think back to the basic beginning of the year concepts such as room arrangement, setting clear expectations for behavior and work, and reinforcing expectations through monitoring, with-itness and accountability. What groundwork do you have to lay or preparations do you have to make to insure your groups function smoothly and with minimal opportunities for disruptions? Brainstorm around the following aspects of grouping.



RESEARCH ON

TEACHER PRAISE

EDUCATIONAL RESEARCH AND DISSEMINATION PROGRAM

INTRODUCTION

This research unit is on providing Teacher Praise as a form of positive feedback. Given its relationship to feedback, it can be presented either as a separate unit on Teacher Praise, as shown here, or as a sub-unit of the section on "Providing Feedback" under the research unit on Direct Instruction or Interactive Teaching. We found it useful to present this research study after the Classroom Management research for several reasons. First, it provided a link to the feedback sections of the classroom management research and served as a transition between the management and teaching effectiveness research. Secondly, this research is counter-intuitive in nature; it's an "eye opener" because some of the findings are counter to teachers' feelings about praising students. We found that teachers readily accept the classroom management research findings because they offer immediate practical applications for teachers and they make sense; they fit teachers' value systems. As noted in an earlier unit, it's important initially to dissuade teachers' negative feelings toward research and to gain credibility for yourself. We introduced the Teacher Praise research after the classroom management research as a way of challenging teachers and encouraging them to question research findings, now that they were willing to view research as a useful tool for teachers.

The basic concepts presented in this research summary are:

- teacher praise is not essential to student learning; it seldom serves as a reinforcer for student behavior.
- Teacher praise can serve a variety of other meaningful functions, particularly since most teachers enjoy praising students and most students appreciate some teacher praise, especially private praise.
- effective teacher praise exhibits the following qualities: contingency, specificity and sincerity.
- more effective teachers are conscious of their distribution of praise.

This unit can be presented as a 1 to 1½-hour training session with approximately 30 minutes for presentation and discussion of the concepts, 15 to 30 minutes for discussion of the activity, and 30 minutes for the Reaction to Research exercise from the preceding research session and Plan of Action exercise for implementing new research concepts.

RESEARCH ON

TEACHER PRAISE

Educational and psychological research have clearly established that providing students with simple, timely feedback or knowledge about how well they're performing is essential to student learning.* Such feedback can be positive, as in an affirmation that a response is correct, "right," "yes," or "okay;" negative, as in a simple response, "no, that is not correct;" or corrective, as in a statement which gives the student the correct response or a cue to the correct response. When providing feedback to students, most educational psychologists stress the value of reinforcing or rewarding good student conduct or academic performance. Moreover, they advocate teacher praise, which goes beyond simple positive feedback, as a desirable form of such reinforcement. Praise not only tells a student he or she is correct, it also expresses approval, admiration, delight or enthusiasm as in "very good!" or "You've got them all right, good work!" Such recommendations by education psychologists presume that students perceive teacher praise as a reward worth working towards.

However, Jere Brophy, a professor of teacher education and educational psychology at the Institute for Research on Teaching (Michigan State University), found in his studies and after reviewing other studies that teacher praise did not have any significant impact on student conduct, academic performance or other classroom processes in ways it should have if it were truly serving as an important reinforcer for students, i.e. a reward students were willing to work harder for (Brophy, 1981). He also found that most teacher praise does not function as a reinforcer either because it lacks certain critical qualities or because it's not being consciously used as a reinforcer. He concluded that **while feedback and positive reinforcement are essential to student learning, teacher praise is not.** This does not suggest that teacher praise shouldn't be used or that it can't be used effectively. Since most students enjoy receiving some praise and most teachers enjoy giving praise, this conclusion simply points out that while praise can serve a variety of functions if used effectively, its power has short term limitations. This summary will highlight some of Brophy's findings on teachers' uses of praise and offer recommendations, based on his research, for using praise effectively.

THE EVIDENCE OF TEACHER PRAISE AS A REINFORCER

Studies of how typical teachers (those not directly involved in DISTAR or behavior modification programs that feature regular use of praise) use praise indicate that they do not use it as a reinforcement technique. If teachers intended praise to be reinforcing they would use it to help shape or modify student behavior by praising when students do well and by not praising when students don't do well. However, typical teacher praise is given infrequently; is largely dependent on students' per-

*Thus, providing feedback, either covert or otherwise, becomes an important on-going responsibility of teachers. Research has also shown that feedback need not always be covert since most learners assume they are correct unless explicitly told otherwise (Barringer & Gholson, 1979).

sonalities or the teacher's perceptions of students' need for praise rather than genuine accomplishment; and is global and uninformative in nature. Dunkin and Biddle (1974) found that teachers use praise "no more than six percent of the total time on the average." Classroom observations by Brophy and Good (1970a) reveal that praise of good answers or good work occurred fewer than five times per hour and praise of good conduct appeared only once every 2-10 hours in the early grades and was virtually nonexistent thereafter. The average student is praised only about once per day, and most of these praise statements are responses to good answers offered during recitations or discussions (Brophy, 1981b). Brophy and Good (1970a) also found a tendency for teachers to praise good work and to criticize poor conduct rather than praise good conduct. Notwithstanding that teacher style and personality influence overall frequency of praise, these low rates generally indicate that teachers do not systematically use praise to reward or reinforce student performance.

Examination of the distribution of teacher praise among students leads to the same conclusion. If teachers were using praise as a reinforcer, one would expect to see teachers concentrating their praise on those students whose behavior needs to be modified the most. However, research indicates that most teacher praise is not given because student accomplishments warrant it, but because students are successful in "pulling" it from the teacher or because student personalities make them more attractive to the teacher. For example, Brophy and Good (1974) found that certain students (generally boys) receive both more praise and more criticism simply because they make more contacts with the teacher and are generally more active within the classroom. These same students also tend to have more of every kind of interaction with their teacher. Brophy et al. also found that some students systematically receive more praise because they initiate contacts with the teacher to show off their work and because they convey an expectation for teacher praise. Still others receive more praise because they exhibit such personality traits as confidence, sociability, and extroversion which make them more socially attractive as individuals and effective in eliciting teacher praise. Some students actually condition teachers to praise them by rewarding teachers directly for their praise with smiles or beaming proudly (Yarrow, Wexler and Scott, 1971). In fact, a recent study (Stokes, Fowler, and Baer, 1978) indicated that preschool children trained to recruit praise from teachers by prompting their teachers to comment about their work, actually received more praise from their teachers following the training than did the children without the training. Thus, while some teachers may consciously use praise to encourage students or reinforce student effort, especially among those experiencing difficulty mastering curriculum, most teachers are not using praise to systematically shape student behavior or performance.

The evidence presented demonstrates that most teacher praise is not used as a deliberate, systematic reinforcement of student behavior or academic accomplishment. Even if teachers intended praise to be reinforcing there is some question as to

its potential effectiveness for modifying or shaping student performance. Only a few students are so strongly interested in pleasing their teacher that they are motivated to work better in exchange for teacher praise. Generally students in the early elementary grades who are still adult-oriented find teacher praise reinforcing (Walker, 1979). Also, at any grade level, but perhaps especially in the earlier grades, students who are low in ability or low achievers may be more responsive to teacher praise and encouragement (Brophy, 1981a). Such praise may be more meaningful and motivating for these students because they frequently experience failure and are likely to be easily discouraged with learning. In contrast, high ability students and high-achievers who are accustomed to success find teacher praise less motivating. Also, older students who are more interested in peer approval are generally less responsive to teacher praise, especially public praise, even to the point of being less likely to perform the praised behavior again. High school students ranked teacher praise and encouragement 10th out of a list of fifteen potential rewards, including the opportunity to reach a goal first (ranked first), being accepted, receiving compliments, trophies, certificates or special privileges, or having one's name in the press. Interestingly, teachers ranked their praise even lower, almost at the bottom of the same list (Ware, 1978). Some social and educational psychologists question the merit of using praise, arguing that teacher praise should not be relied on too heavily as it represents a form of extrinsic reward. Too much teacher praise may focus students' attention on pleasing the teacher rather than working for their personal gratification, an intrinsic reward (Brophy, 1981a).

HOW TEACHERS USE PRAISE

Since it seems that most teachers do not deliberately and systematically use praise as a reward, Brophy drew upon some observational studies and discussions with teachers to make some inferences about how teachers do use praise, some of which is desirable and some is not. Some praise occurs as a spontaneous expression of surprise or admiration in reaction to a student's insightful comment or accomplishment. This unplanned praise probably is more effective than any deliberate attempt to praise particularly since it's based on genuine student accomplishment and because the praise is accompanied by facial expressions and other body language which make it sincere. Such genuine praise not only makes students feel good, it helps them to better understand and appreciate their accomplishments. As always, care must be taken however, not to express too much surprise over a student's accomplishment; otherwise, it might backfire, embarrassing the student and undermining his or her confidence in his or her ability.

Sometimes, teachers use praise to specifically draw students' attention to their accomplishments, particularly with underachievers or students who have a negative self-image. ("You didn't think you could do that, did you? It just goes to show what I've been trying to tell you—if you'll stick with it and not give up so easily, you will find you can do the work.") This kind of praise can be encouraging and inspire students to try harder. However, some teachers may use this

kind of praise to justify an earlier criticism of a student for sloppy or poor work when they could have done better. To the extent that the teacher's praise has a strong, "See, I told you so" message, its effectiveness as a reinforcer probably is questionable.

Some teacher praise is misused as a kind of vicarious reinforcement. The intent of this praise is not so much to praise the desired behavior of the targeted student but rather to indirectly send a message to other students to change or control their behavior. For example, before leaving the classroom for recess, students are supposed to clear their desks. As the teacher looks around the room after the warning bell, she sees that only a few students have cleared their desks. Instead of directing a statement to those students who haven't cleared their desks, the teacher singles out Mary and says to the class and to Mary, "Mary, I like the way you cleared your desk. It looks so neat!" Or consider the teacher, who upon returning to her room after being called away for a few minutes, notices several students in the back of the room who are obviously clowning around instead of working on their assignment. Rather than desisting those students, the teacher praises Nancy and Steve for working so quietly while she was gone. In each instance, the effectiveness of the teacher's praise as a signal to the non-conforming students to behave properly is highly questionable. In the second example, recalling Kounin's research, students may question how well the teacher knew what was really going on or how strongly the teacher intends to exert her leadership and insist that students follow her behavioral rules. Furthermore, unless the children are very young and adult-oriented (wanting to please the teacher), such praise statements would have little impact on the behavior of misbehaving students. Lastly, this kind of praise may have some unfortunate effects on Mary, Nancy and Steve who recognize its true intent as manipulative rather than sincere. They may be concerned about being perceived by their peers as teacher's pets and may even begin responding slowly to the teacher's directions to avoid being singled out.

Sometimes vicarious praise can be an effective alternative to criticizing or "nagging" over inappropriate behavior. For example, at the beginning of the school year when teachers are trying to teach students behavioral rules and instructional procedures, rather than negatively commenting on inappropriate behavior, the teacher might praise students who have learned the new rules as a way of offering guidance about student behavior in a positive way. Such selectively used praise not only serves to reinforce good behavior and re-state class rules, it also helps to create a friendly, supportive atmosphere at the beginning. To avoid the teacher's pet syndrome, such praise may be better directed at groups of students rather than individuals.

Teachers sometimes use praise as an icebreaker to establish communication with an alienated student or a peace offering to re-establish normal relationships with students they've had to criticize or punish. Often this praise takes the form of a compliment regarding the student's grooming or clothing or some other personal aspect. With some students such praise can be helpful, recognizing

that it is not a substitute for solutions to students' communication problems or misconduct.

Most teacher praise serves to provide encouragement to students, especially those of lower ability who have difficulty with their school work or those who have feelings of self-doubt, frustration or failure. Often, this praise is given for effort rather than accomplishment, and when it is given for accomplishment, it's based on some scale of progress appropriate to the individual's ability level. This type of praise is certainly appropriate and potentially very effective. However, care must be taken to insure that public praise of student effort is credible and rewarding. Sometimes praise can inadvertently be counterproductive as in the following example. During a multiplication drill exercise, a teacher was heard giving the following feedback. "Tom, how much is eight times seven? ...Right. Jane, nine times six? ...Okay. Bill, do you know how much two times two is? ...Good, Bill! That's exactly right! Nancy, how much is nine times eight? ...Right." The teacher's conspicuous praise of Bill for knowing two times two could actually embarrass Bill, particularly in light of how the teacher responded to the other students' correct answers to more difficult problems. Bill and his classmates probably noticed the difference between the praise Bill received for his answer and the simple positive feedback the other students received. If Bill is praised in this manner too often, the students will eventually see that the teacher doesn't think Bill is too bright (Brophy, 1981b).

PRAISING EFFECTIVELY

Even though praise may not be a significant reinforcer for student learning, it's apparent that teachers do give praise and that it can serve a variety of appropriate functions. Furthermore, at least under some circumstances, students appreciate receiving praise. It's important then, for teachers to know how and when to praise students to maximize its benefits.

To be most effective, teacher praise should:

- be delivered **contingently** upon a student's performance of a desired or noteworthy behavior;
- **specify** the praiseworthy particulars of the performed behavior;
- be **sincerely** expressed using language which is appropriate to the specific situation and preferences of the praised student (O'Leary and O'Leary, 1977).

Contingency

For praise to have the most meaningful, positive effect on students, it should be given contingently or only after a student has performed a noteworthy behavior. Quality and credibility of praise are probably much more important than quantity. Praise is much more effective when teachers use it selectively, concentrating their praise on genuine student progress or accomplishment (Brophy, 1981b). In fact, when teachers are consistent in using praise contingently, students do recognize that they've done something praiseworthy when they receive praise (Brophy, 1981a). However, if teachers overuse praise or use it indiscriminately, acknowledging both genuine accomplishment and not so significant effort, the praise becomes ambiguous and meaningless for students.

In judging what constitutes praiseworthy progress or accomplishment, the individual student's past history

or performance expectation should be considered. That is, more effective praise is contingent upon some standard of performance which is appropriate to the individual instead of some rigid, absolute standard prescribed for all or comparisons of other students. Thus, it might be appropriate to praise slower students for accomplishments that may not be considered praiseworthy for brighter students. (Such praise might also best be given privately.) Similarly, it might be appropriate to praise a student who gave an incorrect response if the effort behind the response was significant or indicated some level of creativity, imagination or good thinking.

Specificity

Effective teacher praise is specific; it provides concrete information to students about their competence, the value of their accomplishment or the praiseworthy aspects of their behavior. For example, in response to blue group's moving quietly and quickly to their seats in the reading circle, an effective praise statement would be, "Very good! You all moved so quietly and quickly to the circle today. You even pushed in your chairs quietly." The praise not only gives specific feedback about the students' behavior, it also reconfirms the teacher's expectation and rule for moving into reading groups. In contrast, a less effective praise response would be a simple, global statement like, "Very good, boys and girls!"

Anderson, Evertson and Brophy found that much teacher praise is vague rather than specific. In a study of first grade teachers (1979), they found that teachers were specific about 40 percent of the time in their praise of good conduct but only about 5 percent of the time in their praise of good work. While its true that in many academic situations, it's obvious to the student what is being praised, these overall rates are very low, particularly if teachers want their praise to be effective (Brophy, 1981a).

Praise should also help students to more fully understand their accomplishments and better appreciate their own thinking and problem solving. Students frequently know when they've done well and a teacher's praise becomes an affirmation of what they already know. However, there are some situations in which teachers can use their praise to single out specific noteworthy aspects of a student's accomplishment which he or she may not fully appreciate. Such praise might be particularly valuable when students are successful in generating creative ideas or solutions to difficult problems or in working on complex projects. It can also be helpful to students who suffer self-doubt. As much as possible, praise should also focus on the student's accomplishment and not on the teacher as an authority figure or evaluator. This helps students to appreciate their work for intrinsic reasons and not always for extrinsic reasons (Brophy, 1981b).

Credibility

Perhaps the most important aspect of praise is credibility. **Effective praise leaves the student convinced that the teacher has considered the performance carefully and means what he or she says about it** (Brophy, 1981b). For praise to be effective, it must be sincere and genuine and the teacher's expression of praise must reflect that sincerity.

Several researchers have noted a lack of credibility in teachers' praise, particularly in how they express their praise and in the situations they choose to praise. Sometimes the problem is monotony of expression; the teacher relies on only one or two stock phrases and delivers them without animation (Brophy, 1981a). More effective praise has variety in expresion and specificity, highlighting the student's accomplishment. It is simple, not gushy or overdramatic and delivered in a natural voice which conveys sincerity.

A different kind of credibility problem arises when the teacher's verbal expression is contradicted by some negative non-verbal expression or body language such as frowning, grimacing, a show of disinterest or flat affect. This seemed to be a particular problem when teachers praised highly disruptive students, students they disliked, or students who were hostile to the teacher (Brophy, et al. 1981). Body language is thus an important aspect of credibility since students are just as sensitive to what teachers say with their body language as they are to verbal expressions.

The credibility of a teacher's praise is also dependent upon the context in which the praise is given. More effective teachers are sufficiently aware of students' performances to selectively concentrate their praise on genuine student accomplishments and to comment meaningfully on their work. Consider the following examples of teacher praise. "John, I really enjoyed your story, especially the machine that converts peanut butter into energy. I'd like you to read it to the class later today. Also, how about drawing a picture of what that machine might look like? ...Mary, you did a fine job. I especially like the way you wrote your story so neatly—centered headings, no smudges, writing carefully on the lines—keep up the good work!" (Brophy, 1981a)

The teacher's praise of John's work is genuine and sincere focusing on real success. By drawing attention to a particular detail of John's story, she has indicated that she truly was impressed with his work. John is likely to be very pleased about the teacher's praise. In contrast, the teacher's praise of Mary's work focuses on her form and neatness, not on substance—the content or creativity of her writing. The absence of any indication that the teacher liked Mary's story or even remembered the particulars of it, especially coming right after the praise of John's story, is likely to cause Mary to suspect that the teacher either didn't like her story or didn't think too much of her writing ability.

This example illustrates the credibility gap that can occur when teachers consistently and publicly praise some students for substance or genuine accomplishment and others for mere form—a perfunctory expression of praise. If this practice occurs too frequently, it establishes a clear message regarding the teacher's expectations for some students. No doubt, John will appreciate the teacher's praise and view it as a genuine sign of personal accomplishment. However, Mary will probably come to disregard the teacher's praise recognizing its association with form as meaningless for her. Thus, in delivering praise credibly, teachers need to be aware not only of the content and sincerity of their statements but also the genuineness of the student's accomplishment and the context within which the praise is delivered. What may be considered

praise under one set of circumstances may be considered insincere or manipulative under another set.

More effective teachers also enhance the credibility of their praise by considering the preferences of the students whom they are trying to praise. Typically, students in the early elementary grades are adult-oriented and highly interested in pleasing the teacher. These students are reinforced by teacher praise, especially public praise. However, not all students are receptive to teacher praise. Some students simply do not appreciate receiving praise; it embarasses them, especially if it's public, or otherwise makes them feel uncomfortable. As students grow older and become more peer-oriented, teacher praise becomes less influential and when given publicly can be a negative reinforcer. In other words, it so embarrasses the student to be praised in front of their peers that they avoid behaviors which may be considered praiseworthy by their teachers. These same students might better appreciate receiving teacher praise if it were delivered in private or in writing as in a meaningful comment at the top of a paper. Still, for other students, teachers may have to devise other ways of recognizing student accomplishment such as high grades, gold stars (young students), displaying a student's work, giving the student an opportunity to share his or her work with the class or asking the student questions concerning his or her work.

CONCLUSION

Simple, timely feedback—positive, negative or corrective—is essential to efficient learning. There is no question that students need to know how well they are performing, what their strengths and weaknesses are, and what they know and do not know in order to truly learn.

However, teacher praise of student performance, which has long been advised as a form of reinforcement, is not essential to student learning. Brophy found in study after study that teacher praise was either not being used as an effective reinforcer or that its impact on students showed praise to be a weak reinforcer at best. Thus, students do not actually need praise in order to master the curriculum, to learn good conduct, or even to develop healthy self-concepts. Further reflection on this finding can be reassuring as the time and effort required for teachers to notice and effectively praise all the desirable behaviors and performances that should be reinforced would seriously impair their instructional functions (Brophy, 1981b). On the other hand, most students enjoy receiving teacher praise in some form and most teachers enjoy praising. Effective praise can be informative, helping students to more fully appreciate their accomplishments; reinforcing under some circumstances; and appropriate feedback for meeting other student needs such as providing encouragement and support and establishing friendly relationships between the teacher and student.

For praise to be most effective in any of its functions, it must possess certain qualities. It should be given only when a genuinely praiseworthy accomplishment has occurred, recognizing that the standard for such an accomplishment may vary depending upon the degree of progress expected from an individual student. The teacher's praise should be informative, specifying some particulars about the noteworthy behavior or

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performance to help the student better understand his or her successes. And praise should be genuine, sincere and credible. The following table offers some additional guidelines on praising effectively.

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GUIDELINES FOR EFFECTIVE PRAISE

Effective Praise	Ineffective Praise
1. Is delivered contingently upon student performance of desirable behaviors or genuine accomplishment	1. Is delivered randomly and indiscriminately without specific attention to genuine accomplishment
2. Specifies the praiseworthy aspects of the student's accomplishments	2. Is general or global, not specifying the success
3. Is expressed sincerely, showing spontaneity, variety and other non-verbal signs of credibility	3. Is expressed blandly without feeling or animation, and relying on stock, perfunctory phrases
4. Is given for genuine effort, progress, or accomplishment which are judged according to standards appropriate to individuals	4. Is given based on comparisons with others and without regard to the effort expended or significance of the accomplishment for an individual
5. Provides information to students about their competence or the value of their accomplishments	5. Provides no meaningful information to the student about their accomplishment
6. Helps students to better appreciate their thinking, problem-solving and performance	6. Orients students toward comparing themselves with others
7. Attributes student success to effort and ability, implying that similar successes can be expected in the future	7. Attributes student success to ability alone or to external factors such as luck or easy task
8. Encourages students to appreciate their accomplishments for the effort they expend and their personal gratification	8. Encourages students to succeed for external reasons—to please the teacher, win a competition or reward, etc.

Adapted from Jere Brophy, "Teacher Praise: A Functional Analysis," **Review of Educational Research**, Spring 1981, Vol. 51, No. 1, pp. 5-32.

DIRECTIONS FOR TRAINERS

1

Training Activity for TEACHER PRAISE

TITLE: "To Praise or Not to Praise: That Is the Question"

OBJECTIVES: To develop a greater awareness of and sensitivity to situational contexts and their impact on providing appropriate and effective feedback

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15-45 minutes depending on the number of situations discussed

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read the activity directions and some of the situations. Either select a situation for the participants to discuss or have them select one they're interested in. Ask the participants to share how and what kind of feedback they would give for each of the selected situations. Discuss as many of the situations as the participants seem interested in discussing. (This is a very popular activity.)

NOTE: There are no clearly right or wrong responses to these situations. Most of them are fairly open-ended, allowing teachers to respond based on their own experiences and interpretation of the contextual factors which influence their decisions regarding appropriate feedback. In the discussion, it is these contextual factors and subtle differences in feedback responses which are important to highlight.

HINT: Sometimes, one or two of the situations can also be used as a warm-up discussion before presenting the research findings.

"TO PRAISE OR NOT TO PRAISE: THAT IS THE QUESTION"
Training Activity for Teacher Praise

DIRECTIONS: Consider the following classroom situations and determine what kind of teacher response or feedback is most appropriate. Indicate whether you would praise, criticize, give simple positive or negative feedback, provide some other corrective feedback or not respond to the student. Also indicate whether you think the feedback should be given privately or publicly. Give an example of how you would respond.

1. A reluctant reader has just handed in his first book report.
2. You've instructed your class to select one of three enrichment activities you've provided to work on in the event they finish the regular class assignment early. A high-achieving student who finishes early, once again selects the least challenging of the three activities. At the end of the period, he hands in the enrichment activity partially completed. You know he could have finished the entire activity.
3. A highly disruptive student in your class has just picked up a whole stack of papers which were accidentally knocked off your desk.
4. You have graded the class' math tests. The students' test results are consistent with regular patterns of performance in class. The "good" students did very well, the "average" students passed, and the "failers" failed.
5. You gave an English test. The majority of the class received 100%.
6. Johnny never participates in class discussions. He has just volunteered and given his first response. The answer is incorrect.
7. Ellen never participates in class. She has just volunteered and given her first response. The answer is correct.
8. A student for whom you have high expectations and who is a high-achiever has just failed a class quiz.
9. A student whose performance is generally average has just received his first 100%.
10. An underachieving student has just shown you some very substandard work of which she is very proud.
11. It was necessary for you to leave the room in an emergency situation. There was quite an uproar while you were out of the room. The teacher next door complained that your class's activities were disturbing to her class. When you discussed the problem with your class, the guilty parties admitted their involvement.

RESEARCH ON

DIRECT INSTRUCTION OR INTERACTIVE TEACHING

EDUCATIONAL RESEARCH AND DISSEMINATION PROGRAM

INTRODUCTION

This research unit focuses specifically on effective teaching practices. It draws upon a wide body of research and is fairly comprehensive in its reporting of the research findings on teaching effectiveness.

The basic concepts presented in this research summary are:

- direct instruction or interactive teaching
- pacing and success rates
- teacher questioning strategies
- providing feedback to student responses

Given the volume of research findings covering the basic concepts, we recommend that this unit be presented in at least two 1¾ hour sessions—one on direct instruction or interactive teaching and pacing and success rates, and one on teacher questioning strategies and providing feedback to student responses. This allows 45 minutes for concept presentation and discussion, 45 minutes for activities, and 30 minutes for the Reaction to Research and Plan of Action exercises. Other grouping arrangements for presenting the concepts are possible.

Research on

DIRECT INSTRUCTION OR INTERACTIVE TEACHING

If there's one thing that research on teaching effectiveness clearly demonstrates, it's that **teachers do make a difference** in student learning (Brophy, 1979). What teachers do to make this difference represents an orchestration of a very large number of diagnostic, instructional, managerial, and therapeutic skills, tailored to fit specific contexts and student needs (Brophy, 1979).

The research on teaching effectiveness has helped to identify patterns of instruction which are clearly more effective in producing student achievement gains. The term "pattern" is used for several reasons. First, the research on teaching effectiveness is not comprehensive; it addresses only certain aspects of instruction. Considerably more research is needed about how students learn and how teaching practices influence student learning. Secondly, while there are common threads within the identified instructional patterns for all students, there are also identified and unidentified differences which correspond to the differences among students in ability, motivation, anxiety level toward learning, and maturity. While these patterns of instruction are related to achievement gains, they also influence affective gains. Teachers, who produce maximum student achievement gains, also produce healthier attitudes among students toward school and self (Medley, 1977).

The research summarized here addresses the following instructional practices: direct instruction or interactive teaching, pacing and success rates, teacher questioning and feedback. It represents a synthesis of the findings from a very large number of studies by different researchers conducted at the elementary, junior high and high school level. Much of the research comes from elementary classrooms, primarily because of the federal government's support of research designed to evaluate the effectiveness of federally funded intervention programs in early education. Like the classroom management research, the findings on teaching effectiveness are the result of many hours of actual classroom observations of teachers who have been classified as more or less effective based upon their track record for producing consistent student achievement gains. In an effort to identify some (certainly not all) contextual differences in teaching, teachers were further examined on the basis of their effectiveness in producing learning gains with lower ability, lower motivated, higher anxiety students versus higher ability, higher motivated, lower anxiety students.

DIRECT INSTRUCTION OR INTERACTIVE TEACHING

Studies of more and less effective teaching practices conducted at the elementary, junior high and senior high school level have identified a pattern of instructional practices or teaching style which is clearly more effective for producing greater student achievement gains. The researchers have termed this pattern or style **direct instruction.** For many educators, the term direct instruction

conjures up a stereotypic vision of a very structured and disciplined classroom in which students sit in orderly rows and the teacher lectures the whole class from the front of the room. However, in coining this term, the researchers are seeking to describe a pattern of practices in which the teacher is clearly the instructional leader, **actively teaching** students and engaging in academic interactions with students as opposed to merely serving as a resource person or facilitator for students who primarily acquire their learning on their own through workbooks and programmed materials. Loosely described, this pattern of active teaching is one in which:

- **the teacher** places a clear focus on academic goals, promoting extensive content coverage and high levels of student engagement in learning;
- **the teacher** selects instructional goals and materials and structures learning activities;
- **the teacher** actively presents the process or concept under study through oral presentations such as lectures and/or demonstrations;
- **the teacher** assesses student understanding and progress through follow-up with recitations or practice exercises in which students have an opportunity to demonstrate their acquisition of knowledge or skills; and
- **the teacher** provides immediate corrective feedback to student responses. (Rosenshine, 1979; Good, 1979; Brophy, 1979)

From this description, it is clear that this pattern not only describes a set of practices or style in which the teacher is actively teaching, but also a style in which the teacher actively interacts with students through oral presentations, discussions and feedback. For this reason, many researchers and educators have begun to call this pattern **interactive teaching** instead of direct instruction.

This pattern has been shown to be particularly effective at the elementary level where the emphasis is on acquiring and using basic skills and at the secondary level with lower ability or low achieving students who are still mastering basic skills. This pattern has also been shown to be especially effective with secondary students of all ability and achievement levels in such skill development areas as math and reading. In general, it seems this pattern might prove most effective for teaching all student knowledge and skill acquisition where such learning is hiearchical in nature. At the secondary level, in subjects other than math and basic English (language arts and reading skills), this pattern may be most effective with some modification or selective use. Other instructional approaches may be more effective for teaching such subjects as literature appreciation and analysis.

THE ESSENCE OF DIRECT INSTRUCTION OR INTERACTIVE TEACHING

The essence of direct instruction or interactive teaching is teacher-directed learning and high levels of teacher-student interactions. These two components are key to producing greater student achievement gains. Teacher-directed learning means the teacher serves as the instructional leader for students, actively selecting and directing or leading the learning activities. Depending on students'

abilities and maturity levels, the teacher either actively makes all the instructional decisions or prescribes a range of specific learning activities in which students can engage. In contrast, teachers who give students too much responsibility for their own learning, allowing them to make many of the decisions or choices about learning activities and pacing have students who make less academic progress.

As instructional leader, the teacher actively presents and/or demonstrates new skills and content to students; directs students to spend more time working on reading and mathematics activities using texts, workbooks and instructional materials; organizes learning around questions she poses; assigns practice work or homework and holds students accountable for its completion; tests students frequently; and approaches the subject matter in a direct business-like fashion (Soar, 1973; Stallings and Kaskowitz, 1974; Stallings, Cory, Fairweather and Needles, 1977; Good and Grouws, 1979; Brophy and Evertson, 1974). In emphasizing academic goals, more effective teachers, at the elementary level particularly, spend less time on non-academic activities such as arts and crafts.

High levels of teacher-student interaction mean during most of the day or period, or in most learning situations, students spend their time interacting with the teacher either individually or as part of a group as opposed to spending most of their time in independent study or seatwork. Such interactions occur when the teacher orally presents new information to students, the teacher leads discussions or solicits student responses to questions, and the teacher provides feedback to students. More effective teachers are conscious of the distribution of their interactions, providing all students with a fairly equal opportunity to interact individually with the teacher. However, not all interactions need be on an individual basis, students learn from hearing others interact with the teacher and receive feedback as in group discussions (Stallings, 1981).

THE RELATIONSHIP OF DIRECT INSTRUCTION TO INDIVIDUALIZED INSTRUCTION

Many educators who advocate individualized instruction view direct instruction or interactive teaching to be in conflict with their goals since they stereotypically interpret direct instruction to be whole class instruction. Such interpretations are very narrow and inaccurate. Indeed both approaches are easily integrated and mutually supportive.

Consider, the essence of direct instruction or interactive teaching is providing teacher-directed learning and high levels of teacher-student interaction. It is true that proponents of direct instruction advocate instructing students in a whole group or in a few small groups, in most situations. These are the best approaches to maintaining maximum interaction. Having students work in groups, rather than individually, insures that they can be managed relatively easily by the teacher and that the teacher's interaction time is not spread too thinly. Proponents of direct instruction also recognize that grouping allows teachers to better meet the varying educational needs of their students, the major thrust of individualized instruction.

Now consider, the essence of individualized instruction is helping each student develop to his or her full potential by tailoring instruction to meet individual learning styles or needs with the input of students. However, like direct instruction, many educators have different interpretations of what individualized instruction means and how best to reach its objectives.

Some educators attempt to design their instruction to meet the needs of each student in their classroom individually. Such highly individualized instructional approaches tend to be less effective in producing student learning gains because they lack the qualities of teacher-directed learning and maximum teacher-student interaction. These ineffective individualized instruction programs place greater resonsibility on the student for his or her own learning. The teacher no longer actively teaches. but assumes a role more similar to a resource person or facilitator. Students, in this setting, spend most, if not all, of their time working independently at their own pace, acquiring their learning indirectly through workbooks or sources other than the teacher, and working on highly differentiated materials or assignments. These forms of individualized instruction are ineffective because they involve unrealistic expectations about the degree to which students, particularly in the early grades, can access information and manage their learning independently (Brophy and Evertson, 1976).

Stallings (1981) notes that many newly developed programmed reading, mathematics and science materials aimed at providing children with activities in which they could work independently and progress at their own rates have been generally unsuccessful. Students learn best when new information is presented by the teacher to a small group of students who are operating at a similar pace. Learning occurs when students read aloud, ask questions and receive feedback, and hear others ask questions and receive responses. Individualized programs based almost totally on workbooks do not allow for this type of group learning experience.

Nor do highly individualized instructional approaches allow for a high level of individualized teacher-student interaction. Class size necessarily limits this interaction to a minimum. For example, in a class of twenty-five students where the average instructional period may last fifty minutes, if the teacher provides highly individualized interaction, each student will receive only two minutes of interaction with the teacher and will spend forty-eight minutes working alone. This situation overly taxes the teacher's ability to effectively interact with students.

However, not all individualized instruction is ineffective. Indeed, many individualized instruction programs are highly effective because they incorporate the essence of direct instruction. These educators long ago recognized that highly individualized instruction characterized by twenty-five students working independently on twenty-five related but different things most or all of the time is unmanageable and ineffective. Whether these more effective teachers individualize through small manageable groups or through independent learning activities, most instructing situations are still teacher-

directed and high levels of teacher-student interaction are still maintained. The teacher actively presents new information and/or demonstrates skills in mostly whole or small groups. Within these group settings or the teacher-student conference, the teacher prepares students for all independent work, assesses student progress and provides feedback. Thus effective individualized instruction approaches utilize many of the same components of direct instruction or interactive teaching.

DIRECT INSTRUCTION: A PRACTICAL GUIDE

Following is a list of **Instructional Functions*** which serve as a practical description of, or guide to, direct instruction. These functions describe an approach which insures that the teacher is directing and leading student learning and spending considerable time interacting academically with students in the form of teacher presentations of new material, question and answer, discussion or problem-solving with students, and corrective feedback to students.

Perhaps the most significant item in this list of Functions is number three, **"Leading initial student practice."** Research has shown that less effective teachers immediately provide independent practice or seatwork following the presentation of new content while more effective teachers provide an initial teacher-led student practice period before assigning independent student practice. The purpose of this initial student practice period is both to reinforce the concepts presented by the teacher through practice and feedback and give the teacher an opportunity to assess students' understanding of the content presented. During this practice stage, the teacher might direct questions to the students as in a recitation setting, lead a discussion of the new material or assign problems or exercises for the students to work independently at their desks while some work them at the board. As the students complete the problems, the teacher immediately reviews them with the students, provides feedback and checks for students' understanding. At this point the teacher can determine if the students fully understand the new material and are ready for independent practice, if additional practice is needed to fully reinforce the concepts, or if reteaching of the material is necessary for some or all of the students. If the teacher finds that all but a few students understand the material, he can move on to the next function and assign the class independent practice or seatwork (or homework). Those students who do not yet firmly understand the material can be grouped for reteaching and additional teacher-directed practice. Alternative approaches to presenting the material may be necessary to insure mastery of the concepts for this group.

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*This list of Instructional Functions is adapted from an unpublished paper entitled **Teaching Functions in Instructional Programs** presented by Barak Rosenshine at the National Institute of Education's Conference on The Implications of Research on Teaching Practice, February, 1982. The Functions represent a synthesis of the findings from a large number of studies on teaching effectiveness and most closely approximate Tom Good's list of effective teaching behaviors for mathematics.

This list of functions is a guideline. What teachers do to specifically implement and integrate the functions and diagnose student needs with respect to ability and maturity levels, will vary with teacher style. For example, for lower ability and low achieving students and for less mature students with short attention spans, teachers may want to present new content and skills in smaller chunks, and provide extended periods of initial student practice and teacher feedback. Dividing a given content into two smaller chunks and using two consecutive sequences of presentation, initial practice and feedback, steps 2-4 may be necessary to teach these students a given content. For higher ability and high achieving students, the teacher may present larger chunks of content or skill at one time and provide smaller or different initial practice periods according to student need.

INSTRUCTIONAL FUNCTIONS

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1. **Checking previous day's work and reteaching (if necessary).**
   - check homework
   - reteach areas where there are student errors
2. **Presenting and/or demonstrating new content and skills.**
   - provide overview
   - proceed in small steps, if necessary, but at a rapid pace
   - if necessary, give detailed or redundant instructions and explanations
   - phase in new skills while old skills are being mastered
3. **Leading initial student practice.**
   - provide a high frequency of questions and overt student practice (orally with the teacher and with materials)
   - provide prompts during initial learning, when approriate
   - give all students a chance to respond and receive feedback
   - **check for understanding** by evaluating student responses
   - continue practice until students are firm
   - insure a success rate of 80% or higher during initial learning
4. **Providing feedback and correctives (and recycling of instruction, if necessary).**
   - give specific feedback to students, particularly when they are correct but hesitant
   - student errors provide feedback to the teacher that corrections and/or reteaching is necessary for some or all students
   - offer corrections by simplifying question, giving clues, explaining or reviewing steps, or reteaching last steps
   - when necessary, reteach using smaller steps
5. **Providing independent practice so that students are firm and automatic.**
   - seatwork and/or homework
   - unitization and automaticity (practice to overlearning)
   - need for accountability procedure to insure student engagement during seatwork (i.e., teacher or aide monitoring)
   - insure a success rate of 95% or higher
6. **Providing weekly and monthly reviews.**
   - reteaching, if necessary

Permission to reproduce this list was granted by Barak Rosenshine.

SOME SPECIFIC FINDINGS AT THE ELEMENTARY LEVEL

The research findings on direct instruction or interactive teaching at the elementary level show that students taught with a structured curriculum do better than those taught with more individualized or discovery learning approaches; and those who receive much of their instruction directly from the teacher do better than those expected to learn on their own or from one another (Bennett, 1976; Gage, 1978; Good, 1979; McDonald, et al., 1975; Rosenshine, 1976; Stallings, 1975). Additionally, teachers' interactions with students in the form of lectures and demonstrations are important, as are recitiation, drill and practice (Brophy and Evertson, 1976; Good and Grouws, 1975; Brophy, 1979).

Brophy and Evertson found that early elementary students, and especially those with lower ability and motivation levels, showed significantly higher achievement gains in more structured environments in which learning is highly teacher-directed. The significance of a structured environment is in part due to the emphasis on mastering basic skills at the early elementary level (as opposed to using basic skills in the later grades to acquire new knowledge), and in part due to the lower cognitive development of these students.

The early elementary grades appropriately involve more small group instruction relative to whole class instruction. More effective teachers of early elementary students present new information or demonstrate new skills in smaller chunks, providing students with immediate and sufficient opportunities to practice skills after teacher demonstrations. These teachers closely monitor student performance and provide immediate, corrective feedback. More effective teachers of early elementary students circulate around the room frequently and more often initiate feedback comments with students who are working on assignments independently in contrast to letting students come to the teacher for feedback. This limitation on young students' physical movement insures a greater degree of teacher-directed student movement and can help to minimize student behavior problems.

In contrast, instruction for upper elementary students (grades 4 and up), higher ability and higher achieving students is less structured. The direct instruction pattern of teaching is still most effective for producing achievement gains, but older, more able students benefit from being offered more freedoms and some opportunities for independent learning. As these students are generally well motivated, they can be expected to take some responsibility for their own learning. As these students demonstrate that they are capable of assuming more independent responsibility, more successful teachers allow students the opportunity of moving more freely about the room, or in small groups. **Similarly, as low ability or low achieving students benefit from a structured curriculum and demonstrate substantial progress, more successful teachers recognize the need to relax the structuredness of the environment and offer these students more freedoms and opportunities to make choices** (Brophy and Evertson, 1976).

SOME SPECIFIC FINDINGS AT THE JUNIOR HIGH LEVEL

Evertson, Anderson and Brophy (1978) studied more and less effective junior high teachers of mathematics and English. They found that more effective mathematics teachers:

1. emphasized lectures and drill, and spent less time using individualized instructional techniques.
2. were highly task-oriented in their instruction (although there were indications that personal interest in students and tolerance of some distractions were effective in low-ability/achievement classes).
3. were more active (e.g., they had more interactions with students and tended to lead all interactions).
4. made more extensive use of effective praise during class discussions and treated student contributions with respect.

Brophy and Good (1980) also found that teachers who exhibited more of the behaviors in column A had students who achieved more and held more positive attitudes toward learning and their teachers than did the students of teachers who exhibited more of the behaviors in column B.

JUNIOR HIGH MATH TEACHER BEHAVIORS

Column A	Column B
GREATER STUDENT ACHIEVEMENT MORE POSITIVE ATTITUDES	LESS STUDENT ACHIEVEMENT LESS POSITIVE ATTITUDES
■ Effectiveness of teacher's management methods	■ Classroom interruptions
■ Student obedience to teacher	■ Length of time after bell for class to begin
■ Consistency in enforcement of rules	■ Variety and choice in assignments
■ Efficiency of transitions during class period	■ Teacher use of self-paced work
■ Teacher enthusiasm	■ Teacher primarily assigns seatwork
■ Student respect for teacher	
■ Teacher deals effectively with personal problems	
■ Academic encouragement by teacher	

- Teacher concern for academic achievement and grades
- Teacher use of blackboards for lectures and discussion
- Time allotted for class discussion
- Amount of class time spent in productive work

Interestingly, their findings on English teachers showed that there were no consistent patterns of teaching to suggest why some teachers were more effective. The investigators suggest that part of the problem may be that English teachers (in contrast to math teachers) tend to agree less on goals—some value literary analysis skills, others value writing skills. These findings suggest a conclusion similar to the one reached by McDonald (1975) and Soar and Soar (1978), that different patterns of teaching may be effective for different goals or subjects (Good and Brophy, 1980).

Indeed, while research has shown direct instruction or interactive teaching to be an effective pattern for teaching skill and content to students at all levels (with adaptations as to the degree of structuredness, variety and independent learning), other teaching patterns may be more effective for other kinds of student learning, like secondary level literature appreciation and analysis.

For teaching basic skills in secondary schools, Stallings, Cory, Fairweather and Needles (1978) identified a number of effective instructional strategies including interactive instruction, time management, and focus of instruction. Effective teachers who helped secondary students reading at the first- to fourth-grade level gain up to two grade levels in one school year distributed their class time in the following way:

Instruction— giving examples, explanations, linking to student experience	16%
Review— discussion of seatwork and story content	12%
Drill and practice to help memorize—	4%
Oral reading in small groups—	21%
Silent reading—	9%
Written assignments—	4%

(Actual percentages varied according to student achievement levels.) Observe that the greatest time allocations are given to highly interactive teaching behaviors.

Stallings (1981) notes that ample amounts of oral reading were helpful for low achieving students, although it was not so important for those students achieving above a fourth-grade level. Low achieving students need to hear and way words as well as read and write the words. These students can usually pronounce or sound out words, but often do not understand words in the context of the story. These secondary students' com-

prehension scores are often lower than their vocabulary scores. Oral reading allows the teacher to hear the student's reading problem, ask clarifying questions, provide explanations to help students comprehend new words, and link the meaning to the students' prior experience or knowledge. Students who were in classrooms where slight or no gain in reading was made spent more time than other students on written assignments (28%) and silent reading (21%). They had less instruction, discussion/review, and drill/practice. In short, these students received less direct instruction and less interaction with the teacher than other students. Some of these students were assigned to spend entire periods working in workbooks with very little instruction from the teacher. Such classrooms often exhibited more misbehavior.

Throughout the study, it was clear that teachers who were interactive in their teaching style had students who achieved more in reading. According to Stallings, this interactive style included providing oral instruction for new work, discussing and reviewing students' work, providing drill and practice, asking questions, acknowledging correct responses and supportively correcting wrong responses.

Stallings (1981) also notes that this type of interactive instruction is important when teaching subjects other than remedial reading. Tom Good (1980) found junior high school students learned more mathematics in classrooms where teachers actively instructed, made assignments, provided clear directions, asked students appropriate questions, and provided immediate feedback to student responses. Stallings (1981) also notes that, unfortunately, many teachers of general math students are not interactively teaching. In a study of math classes in 11 schools, Stallings and Robertson (1979) found that teachers more often assigned general math students workbook exercises and less often gave instruction or reviewed seatwork than they did with students in geometry or calculus classes. In fact, some teachers of both advanced and other general math classes were observed actively teaching the advanced classes and not the other classes. While all students need active or interactive teaching to maximize learning gains, students in basic classes especially need active teaching to better understand relationships and to stay on task.

PACING AND SUCCESS RATE

Pacing and success rate are two important and related factors influencing student learning. Pacing refers to the speed with which teachers move students through the material to be learned, i.e., specific lessons, activities and the curriculum. In general, research shows that successful teachers move students briskly from step to step, keeping the steps small and easily attainable by most students (Brophy, 1978). The principle underlying successful pacing is teaching material that is at the appropriate level of difficulty but moving students through it briskly.

Success rate refers to the overall difficulty level of the material being presented to students. The California Beginning Teacher Evaluation Study (BTES) found that students who are given an opportunity to engage in learning activities which they can complete successfully 75 percent of the time achieve more than students

who are given instruction at a difficulty level in which they will be successful only 50 percent of the time. For example, during the initial practice period with students which may be a recitation, optimal learning takes place when teachers ask students questions that they can be expected to answer correctly about 75 percent of the time (a 75 percent success rate).

The figure of 75 percent is only an average estimate of the overall level of success students should be experiencing. It is intended to serve as a barometric reading for the class not as an exact measurement of how many times any given student or all the students answer questions correctly. Recall that students learn from hearing other students respond correctly. In general, the research data strongly supports the approach of giving students a high level of successful learning experiences (not to be confused with giving work that is too easy) over the popular notion that students need to be constantly challenged. Too often this latter approach results in trying to teach students material that is too difficult. Allowing students to master materials quickly creates a feeling of personal success and progress. Even Kounin's research on classroom management stresses giving students a sense of progress to minimize against boredom and maintain students' attention to their work.

The fundamental principle that learning will be optimal when presented at the optimal difficulty level is supported by considerable research including the Brophy and Evertson (1976) study of second- and third-grade teachers, as well as the California Beginning Teacher Evaluation Study. The findings from Brophy and Evertson suggest that low ability or low achieving students learn more by having less material taught to them, by having it presented in small steps which they can easily master without becoming frustrated, and by having it taught to the point of overlearning. In fact, it seemed important for teachers of low ability students to "err" on the side of overteaching rather than move too briskly. Thus more successful teachers moved at a relatively slow pace, taking time to teach and reteach the fundamentals of reading, writing and arithmetic. Most assignments were at the skill practice or factual memory level. In terms of success rate, students learn best when instruction is tailored to give them greater opportunities for successful experiences, say 80 percent of the time. Again, while this is only an estimate, it's clear these students, who so often experience failure, achieve more when they are given instruction which they can quickly and successfully master.

Rosenshine's review of educational research (1982) confirms this point. For younger students and lower ability students, the key concept here is mastery to the point of overlearning. Basic skills—arithmetic and decoding—are hierarchically learned skills, so that success at any given level is dependent upon the application of knowledge and skills learned at an earlier point. Typically, students are not able to retain and apply knowledge and skills unless they have been mastered to the point of overlearning—to the point where they are automatic. Thus students must be helped to achieve this level before they can successfully move on to the next step.

Rosenshine also argues that this

overlearning and automaticity of basic skills is necessary for higher processing. In discussing beginning reading, Beck (1978) noted that the data supports the position that the brain is a limited capacity processor and that if a reader has to spend energy decoding a word (whether through phonics or context) then there is less energy available to comprehend the sentence. Similarly, in mathematics, Rosenshine (1982) notes that mathematical problem solving is enhanced when the basic skills are learned to the point of automaticity.

For higher ability and higher achieving students, this finding for automaticity must be balanced with Brophy and Evertson's finding that providing interesting variety and stimulating assignments was more important for higher ability and more highly motivated students than continued practice at mastering the fundamentals. These students cover the same material more quickly and learn more by being given material in somewhat larger chunks at a faster pace and by being challenged with slightly more difficult questions and assignments. More effective teachers varied their materials and teaching methods, and blended in some problem solving and other high level activities involving application of the skills as well as mastery of the skills.

These higher ability or high achieving students learn best when they experience a success rate of about 70 percent. It seems particularly interesting that while these students need to be challenged more, they still need to experience a fairly high level of success. Teachers have the difficult task of challenging these brighter students without overchallenging them to the point where they become frustrated and achieve less.

In judging success rate, Brophy and Evertson make a clear distinction between learning situations in which the teacher is present to provide immediate feedback and help to students and those situations, such as seatwork or even homework, in which the teacher may not be immediately available for feedback for all students. During the latter situation in which the teacher cannot be available for all students, Brophy and Evertson recommend that students be given assignments which they can be expected to complete successfully on their own about 95 percent of the time. Such a high success rate is necessary if teachers are to expect students to work continuously to completion.

This raises an important consideration for homework, a situation in which the teacher is totally unavailable to the student. If a teacher finds that his or her students are not completing their homework as he or she expects, one possible explanation might be that the assigned homework was too difficult for students to complete on their own. From a slightly different but related perspective, the amount of work given was not consistent with the teacher's overall homework assignments. (An overly long assignment, compared to most, may be considered too difficult.)

Finally, success rate as a critical factor influencing student learning is less applicable to older, average or higher achieving students at the secondary level. Instead, self-motivation plays a much stronger role (Fisher, 1982).

TEACHER QUESTIONING AND FEEDBACK

As with much of research, while the findings on teacher questioning and feedback are not comprehensive, the research has identified several factors which influence the effectiveness of teacher questioning of students and providing feedback. These factors address the issues of to whom you direct questions, what kinds of questions you ask, how you ask questions and how you respond to student responses.

Who to call on: Turn Taking

Turn taking refers to the process by which teachers select students to respond to the questions they pose. Most educators and many educational researchers, including Jacob Kounin (1970), have argued that more effective teachers randomly select students to respond to questions on the theory that holding students in suspense as to when they can expect to be called upon keeps them alert and holds them accountable for the entire class discussion. This accountability is a good group focus technique (See research on Effective Group Management Practices) which insures high levels of student engagement.

However, Brophy's research on teacher questioning found that teachers who used ordered or patterned turn taking procedures for selecting students achieved better learning results than teachers who used random turn taking. In a two-year study of elementary classrooms, Brophy and Evertson (1976) found that teachers who called on students to read in a reading group in a patterned order rather than a random order tended to produce better achievement gains than teachers who did not. Patterned turns seem to reduce the anxiety level in students because everyone knows when they are going to read. This allows students to concentrate more fully on their performance. Furthermore, at least among younger children, they don't appear to circumvent the lesson by not paying attention when other children read and only "boning up" on their paragraph or passage.

The most important advantage of patterned turn taking is that it gives every student an opportunity to be called upon to demonstrate their knowledge to the teacher and to receive feedback from the teacher. It is an efficient way to insure that all students have equal opportunities to interact directly with the teacher. From the research on interactive teaching (Stallings, 1982), it's clear this is an important variable in maximizing student achievement.

Brophy found that teachers who call on students randomly tend to more often call on certain competent students who are more likely to respond correctly or demonstrate skills accurately while ignoring certain other students who experience more difficulty responding. Thus teachers' expectations of students may unconsciously influence their choices of students when they select turn takers randomly. Still other teachers seem to unconsciously miss students seated in certain areas of the room as in the students sitting closest to the windows. Some teachers avoid looking in the direction of the windows because of the glare. Brophy observed one teacher who systematically called on all the students in the class except those seated in the first row. When this was brought to her attention, she was surprised. Apparently from her

vantage point in the front of the room, she looked directly over and beyond the heads of the students in the first row.

Patterned turn taking also has implications for student ability levels. In high ability reading groups or other instructional settings where there is strong competition for either extra reading turns or opportunities to show off to the teacher, patterned turn taking helps to eliminate some of the need for competition and insure everyone an equal number of turns. In low achievement groups where anxiety can be a key stumbling block to learning, patterned turn taking has been shown to reduce anxiety or at least hold it to a minimum. Likewise it serves to insure that everyone receives an equal number of opportunities to interact with the teacher.

In considering the seemingly conflicting research findings on random turn taking versus patterned turn taking, it is important to consider the intent underlying both bodies of research. The intent of random turn taking is to hold students' attention and keep them accountable during the lesson. Brophy's research has shown that with younger students such accountability techniques may not be so critical, but with older students particularly, such accountability or group focus techniques are necessary to maintain student engagement. Indeed without such techniques, older students, unless well motivated, are more likely to "tune out" the teacher and the lesson until they anticipate being called upon to respond. The intent of patterned turn taking is to insure that all students have equal opportunities to interact with the teacher and receive feedback, an important factor in student achievement. Brophy argues that the merits of insuring such opportunities for interaction far outweigh the liabilities of losing students' interest. The best approach for selecting students seems to be a combination of the two intents. Teachers need to identify processes or patterns for selecting students by which they can readily determine which students have or have not had an opportunity to respond. Such patterns or processes need not be readily recognizable to the students and can be changed daily or weekly. For example, teachers might use a seating chart to record which students they've called upon during a lesson or the day, or they might draw students' names from a fishbowl, etc.

Another consideration in determining which students to select to respond to teacher questions is whether or not to call on volunteers. As with patterned turn taking, Brophy and Evertson (1974) found that teachers should limit the number of times they call on volunteers in order to control the distribution of opportunities for students to interact with the teacher.

What Questions to Ask: Success Rate

Although teachers are frequently urged to ask students higher-level cognitive questions, recent research does not support this emphasis (Rosenshine, 1979). In fact, there is considerable evidence to suggest that students (particularly low achieving or low ability students) achieve more when they are asked a high frequency of lower-level questions of the factual or inferential single-answer type (Rosenshine, 1979). Students who are asked a high frequency of higher-level, open-ended, opinion type ques-

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tions actually achieve less (Stallings and Kaskowitz, 1974; Soar, 1973; Brophy and Evertson, 1974). In an experimental study, Gall (1975) found that asking students different numbers of higher-level questions has no effect on the students' performance on essays or on tests measuring these.

One explanation for these somewhat surprising findings might be that most of the research on teacher questioning has been conducted at the elementary level and there is some uncertainty as to the expected cognitive development of these students and their ability to respond to higher-level questions. Another explanation lies in the use of standardized tests as a measure of student achievement. Most achievement tests ask lower order factual or single-answer questions; they seldom ask questions requiring interpretive or critical thinking skills.

Thus it seems from the research, asking students a high frequency of factual or inferential questions is more effective for producing student achievement gains. However, increasing achievement per se is not the only goal of education; students do need critical thinking skills. Developing such skills among students may be addressed by diversifying teachers' questioning strategies to incorporate higher-order "thought" questions. Keeping in mind the research on success rates, teachers will be more effective if they pose questions which students can answer successfully 75 percent of the time.

How to Ask Questions: Wait Time

Kounin's research on group focus found that more effective teachers more often ask a question before calling on a student to respond. This technique helps to keep students alert and tuned in to the lesson by holding them in suspense as to who will be selected to respond. This technique also gives the teacher time to consider which student(s) can successfully answer the question posed (success rate).

Having asked a question, **wait time** becomes a critical factor for both high and low achieving students. Rowe (1974) found that one of the most common mistakes teachers make is to push too hard for student answers. After asking a question, teachers give students an average of just one second to initiate an answer. If a student fails to reply within that second, teachers typically repeat the question or redirect it to another student. When teachers do get a response, they wait somewhat less than a second after the response before commenting, asking a new question or moving on to another topic. Under these conditions, students tend to respond to questions using short phrases and seldom offer complex answers.

When teachers lengthen the wait time between asking a question and calling on a student to three seconds, Rowe noticed a significant impact on students' responses. Students' answers became substantially longer and contained more expamples of speculative thinking. Teachers also received more appropriate answers. Similarly when teachers waited longer (three seconds) after students responded before commenting or moving on, it gave students an opportunity to enlarge on what they said. Generally, longer pauses before repeating a question or redirecting to to another student gave students

longer time to prepare their answers. This greatly reduced the number of times teachers received an "I don't know" or no response. Overall, increasing the wait time makes recitation activities more conversational and less inquisitional (Gage and Berliner, 1979).

PROVIDING FEEDBACK TO STUDENT RESPONSES

Feedback, receiving knowledge about one's performance, is essential to student learning. To be effective, feedback should be timely and specific; it should give the student information. Feedback can be positive, as in a simple affirmation that a response is correct, "right," "yes," or "okay;" negative, as in a simple response, "no, that is not correct;" or corrective, as in simplifying the question or responding with a statement that gives the student a cue to the correct response or the correct response itself.

Brophy and Evertson (1976) found significant differences between more effective patterns of providing feedback to high ability or high achieving elementary students and low ability or low achieving elementary students. In general, they found high ability or high achieving classrooms were characterized by well motivated and competitive (sometimes overly competitive) students who were eager to respond to the teacher's questions. They raised their hands energetically and tended to speak out loudly and clearly when giving their answers. In contrast, low ability or low achieving classrooms were characterized mostly by students who wished to avoid being called upon. When they were, these students often looked down or away, muttered, shrugged or spoke in a whisper. It was clear these students were trying to avoid responding at all.

While effective teachers of high ability or high achieving students would have little difficulty getting the response they wanted from their students, they would have to work hard to control the competitiveness of their students. This meant working hard to keep students' attention focused on content rather than racing to be the first one to give a correct answer. It also meant maintaining order and control over students' responses to insure respect for a fellow student's turn to respond. More effective teachers enforced rules against call-outs, insisting on quiet and respect whenever another student was responding or thinking of a response.

In contrast, effective teachers of low ability or low achieving students often had to work to get any kind of response at all from their students, let alone a correct response. While teachers of high ability students had to deal with competitiveness, teachers of low ability students had to deal with a fear of failure. As a result, more effective teachers patiently and persistently worked to get students to respond. They made it clear that they expected to receive a response from their students, and would wait to get it, whenever the students were called upon, even if the response was simply, "I don't know." The important thing to these teachers was encouraging students to give any kind of reasonable response. Thus, in contrast to the approach used with high ability students, these teachers encouraged student initiated comments, accepted student call-outs when they were relevant, and praised good ef-

fort even if the answer was not completely correct.

More effective teachers of high ability or high achieving students conducted fast paced lessons in which they moved around the group quickly, giving a large number of students multiple opportunities to respond. Questions posed to students were of a difficulty level in which 70 percent of them could be expected to be answered correctly. In those instances in which a student who was called upon gave an incorrect answer or was unable to answer, the teacher usually gave the correct answer and only sometimes redirected the question to another student. It seemed important for the teacher to provide the correct answer as feedback instead of calling on another student to respond, since too often calling on another student only reinforced an unhealthy atmosphere of over-competitiveness, with students rushing in to be the first to give a correct answer when someone else failed. Furthermore, Brophy and Evertson's research showed that attempting to improve responses (probing for some answer from an "I don't know" or eliciting a higher level answer) from these students was more often associated with less learning gains. At first surprising, these researchers determined that since most high ability students already know most of the answers to the questions they are asked (at least to the extent of what they gave), attempting to improve upon their responses was often pointless pumping. If these students knew a better answer they would have already given it. To the extent that high ability students are asked to respond factually, this research seems valid. Some teacher discretion may be in order when students are asked to "reason" through to an answer. In this situation, probing by the teacher may prove to be more successful in reaching a higher level response from the student.

In low ability classrooms, lessons moved at a much slower pace. As a general rule, it was better for teachers to teach thoroughly to the point of overteaching rather than moving through material too quickly. The research indicates that it's important for the teacher to provide students with immediate opportunities to practice the skills presented as well as immediate corrective feedback. Thus more effective teachers of low ability or low achieving students conducted short group lessons, giving clear demonstrations, and then immediately moved around the group giving each student an opportunity to practice the skill learned and receive timely, corrective feedback. Teachers who simply gave demonstration lessons without providing students with an immediate opportunity for practice and feedback and/or teachers who gave opportunities for practice but didn't monitor to provide student feedback were less effective than those who did.

To elicit student responses to teacher questions, more effective teachers were patient and made it clear that they expected a response. When students responded, "I don't know" or responded incorrectly, it was often because they were fearful (of failure) or anxious. When the teacher recognized such a situation, he or she tried to get an improved response by providing clues or hints and by simplifying the question. Simply repeating the same question only made the students more anx-

ious. When the student clearly gave what he thought was a correct answer and was wrong, attempts to elicit an improved response were almost always unsuccessful without substantial teacher help in the form of providing more information. One exception to this practice occurred in reading instruction where phonics clues (providing the first sound, etc.) were useful for children, particularly low ability students. Giving a student a clue when they were stuck on a word helped make the response easier for the student and established an expectation that students would make responses when called upon.

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RESEARCH ON

DIRECT INSTRUCTION OR INTERACTIVE TEACHING

A REVIEW OF CONCEPTS

1. Studies of relatively more and less effective teachers at the elementary, junior high, and secondary level have clearly established that direct instruction or interactive teaching is more effective in producing student achievement gains (skill and knowledge acquisition). Or, students learn best when the teacher is actively teaching and interacting with students.
2. Loosely defined, direct instruction or interactive teaching describes a pattern of active teaching where:
   - the teacher places a clear focus on academic goals, promoting extensive content coverage and high levels of student engagement;
   - the teacher selects instructional goals and materials and structures learning activities;
   - the teacher actively presents the process or concept under study through lectures and/or demonstrations;
   - the teacher assesses student progress through follow-up with recitations or practice exercises in which students have an opportunity to demonstrate their acquisition of knowledge or skills; and
   - the teacher provides immediate corrective feedback to student responses.
3. The two basic ingredients of direct instruction are: teacher-directed learning and a high level of teacher-student interaction.
4. The degree of structuredness and student independence associated with the direct instruction approach vary according to student ability and maturity levels.
5. While direct instruction is effective for skill and knowledge acquisition, not all types of learning fall into this category. For example, a secondary English unit on literature appreciation may be more effectively taught through another approach.
6. A practical guide to direct instruction encompasses the following major instructional functions:
   - checking previous day's assignment
   - orally presenting and/or demonstrating new content and skills
   - directing initial student practice to assess understanding
   - providing positive feedback and correctives
   - providing independent practice so students are firm and automatic in content and skills
   - providing weekly and monthly reviews.
7. This guide to direct instruction is highly flexible in that teachers can select specific strategies for implementing the guidelines which fit their style, desire for variety and assessment of student ability.
8. Generally, to the extent that students are younger, of lower ability (mastering basic skills), and less motivated, teachers are more effective when they:
   - structure students' learning experiences

- actively present new information in small steps but at a rapid pace
- give detailed and more redundant information and explanation
- have a high frequency of initial student practice in the form of questions, especially at the factual level
- encourage students to respond to questions, accepting call-outs when they are relevant to the subject
- provide positive feedback, including some praise when students respond correctly and firmly, and a moderate amount of process-oriented feedback when students respond correctly but hesitantly
- insure a success rate of 80 percent
- divide seatwork into smaller assignments
- provide continued student practice to the point of overlearning or automaticity.

9. Generally, to the extent that students are older, of higher ability, and well-motivated, teachers are more effective when they:
   - have less structured learning experiences—provide students with more opportunities to make choices and to work independently
   - actively present new information in larger, but appropriately sized steps and at a rapid pace
   - have a fairly high frequency of initial student practice (not as high as for lower ability students) using questions at the factual level as well as some higher level questions involving application
   - insure a success rate of 70-75 percent
   - call on students to respond, maintaining order and control over students' responses to insure respect for fellow students
   - provide simple positive feedback when students answer correctly and firmly, or immediately pose another question (as a feedback signal) to maintain momentum
   - provide moderate amounts of reinforcing or process-oriented feedback when students are correct but hesitant
   - give the correct answer more often as feedback when students respond incorrectly
   - provide interesting variety and stimulating assignments for continued student practice.

SUMMARY OF KEY INSTRUCTIONAL BEHAVIORS FOR MATHEMATICS TEACHERS

Daily Review (First 8 minutes)
- a) review the concepts and skills needed to do the homework
- b) have students correct each other's papers. If necessary re-teach areas where students had problems and difficulty.
- c) ask several mental computation problems

Development of new material (20 minutes)
- a) briefly focus on prerequisite skills and concepts
- b) teach the new material using explanations, demonstrations, "process explanations" and illustrations
- c) assess student comprehension of new material by asking questions and/or supervising practice
- d) repeat explanation where necessary

Prompted practice (10 minutes)
- a) students work 1-3 problems with teacher supervision and help
- b) teacher provides frequent process explanations
- c) continue prompted practice until success rate is high

Seatwork (15 minutes)
- a) provide uninterrupted successful practice
- b) get everyone involved, then sustain involvement
- c) alerting: let students know their work will be checked at end of period
- d) accountability: check student's work

Homework assignment
- a) assign on a regular basis at the end of each math period
- b) should involve about 15 minutes of work to be done at home
- c) should include one or two review problems

Special reviews

Weekly
- a) conduct during the first 20 minutes each Monday
- b) focus on skills and concepts covered during the previous week

Monthly
- a) conduct every fourth Monday
- b) focus on skills and concepts covered since the last monthly review

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DIRECTIONS FOR TRAINERS

1

Training Activity
for
DIRECT INSTRUCTION OR INTERACTIVE TEACHING RESEARCH

TITLE: "Planning Instructional Time"

OBJECTIVES: To focus teacher's attention on how much time they allocate to interactive instruction.

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce Activity for appropriate number of participants

DIRECTIONS: Have teachers read the entire activity. Ask them to complete the chart based upon a class or subject they've already taught or upon their plan for teaching an upcoming class. Encourage teachers to reflect on whether they would make any changes in their instructional plan based upon the research findings on interactive teaching. Ask teachers to share their strategies for reteaching those students who have not successfully mastered the material taught. Hint: Knowing how to plan for and provide reteaching for students seems to be a particular instructional management problem for teachers.

PLANNING INSTRUCTIONAL TIME

Training Activity
for
Direct Instruction or Interactive Teaching Research

Drawing on your own classroom situation, pick out a particular class or subject you taught this past week which you felt went extremely well, or one you are planning to teach which you want to go extremely well. Fill in the following chart with the information requested. Analyze your time allocations to determine where your priorities seem to be with respect to the instructional functions. Are you spending sufficient time interacting with students, reviewing, presenting and practicing material?

Class _____ Total Allocated Time _____ minutes FORMAT

INSTRUCTIONAL FUNCTIONS	TIME	(✓)	(✓)	(✓)
Review of homework (or previous lesson)				
Need to re-teach?				
Presentation of new concepts/skills:				
Initial student practice/feedback				
Need to re-teach?				
Independent student practice:				
Need to re-teach?				

Assignment:

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*Indicate criteria for grouping:
A = ability C = student choice
B = interest D = other

Whole Class

Small Groups
(A, B, C, or D)*

Individual

EDUCATIONAL RESEARCH AND DISSEMINATION PROGRAM

DIRECTIONS FOR TRAINERS

2

Training Activity
for
DIRECT INSTRUCTION OR INTERACTIVE TEACHING RESEARCH

TITLE: "Teaching Effectiveness Case Study"

OBJECTIVES: To recognize effective direct instruction or interactive teaching behaviors and the contextual factors which help shape the degree of structuredness and teacher directedness associated with this pattern of instruction.

PROCESS: Group Discussion

FORMAT: Large or Small Group

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants.

DIRECTIONS: Have teachers read the entire activity. Then, depending on the available time, either ask the teachers to jot down their answers to the questions in the space provided before sharing them, or simply lead a discussion, having the teachers share their response to the questions with the group.

ANSWERS TO QUESTIONS

A. You would expect to see lower ability or low achieving students in her class. The clues to identifying the types of students present are:
   1. high degree of structuredness
   2. teacher's acceptance of student call-outs
   3. large proportion of time devoted to teacher presentation/demonstration and monitored student practice
   4. investment of several days of instruction on the same skill

B. Mrs. Johnson appears to be a very effective teacher. It seems likely that her students will have a high success rate. Some of the clues are:

1. the amount of time devoted to review, presentation/demonstration and monitored student practice before assigning seatwork
2. the degree of feedback and individual assistance given to students
3. the willingness to reteach students
4. the degree of preparation of students for assignments—clear directions and expectations for work

C. Allow teachers to share their own strategies

EDUCATIONAL RESEARCH AND DISSEMINATION PROGRAM

TEACHING EFFECTIVENESS CASE STUDY

Training Activity for Direct Instruction or Interactive Teaching Research

The following is a case study description of an effective teacher who exhibits many of the direct instruction or interactive teaching practices. Read through the case study and answer the questions at the end.

CASE STUDY

Each day as students enter Mrs. Johnson's classroom they find a written schedule of the day's activities, including a breakdown of time, subject area, skill or concept, types of seatwork and homework assignments, i.e. worksheet, workbook, textbook, etc., and what materials students will need.

Mrs. Johnson feels this gives her class a sense of the number and nature of the tasks she expects them to be involved in during the day. She has also taught her students (as part of her rules and procedures) to organize their materials according to the schedule to make for easy transitions between activities. As students enter and "put things in order," they flip over a green card taped to the front of the desk indicating they are ready to "go." Mrs. Johnson, therefore, can quickly scan the room during attendance, assist those students who are having trouble, and get the class under way. When all students are "organized," the cards are flipped back, to be used at the beginning of each new activity.

A Typical Lesson

A typical math session in Mrs. Johnson's class might look like this. Mrs. Johnson reviews the skills/concepts of the previous night's homework, as students check each other's papers. Where there seems to be a problem or lack of understanding, Mrs. Johnson will go back over the problem, working it through on the board or overhead projector. She sometimes has a student work through the problem for the class but only if she is sure the student understands it. She constantly monitors the class with quick checks for understanding. In addition, she may ask students to solve additional problems reflecting the same skill or concept. When necessary she "re-teaches" skills/concepts with which students are having trouble.

Questions:

A. Assuming Mrs. Johnson is an effective teacher, what kinds of students would you expect to find in her class? What are the clues which help you identify student characteristics?

B. Do you feel Mrs. Johnson's students will have a high success rate? What clues determine your response? What other techniques do you use to insure student success in responding to questions?

C. The "Green Card" is just one example of a "check" for readiness, attention, and understanding. What other techniques can you suggest which are "quick checks" particularly in small or large group situations?

Presentation of New Material

When new material is presented, Mrs. Johnson is very active demonstrating new skills, watching students practice the same or similar activity at the board, asking questions and explaining the process. Student call-outs are allowed if related to the work. If a student responds to a question incorrectly, she waits for self-correction, provides clues or rephrases the question. The teacher presentation/demonstration and monitored student practice segments of the lesson involve about 70% of the math time slot.

Individual Work

Individual seatwork assignment time ranges from 15-20% of the math period. During this time, Mrs. Johnson gives clear directions as to what is to be accomplished by the class, checks for understanding, and then circulates around the room giving individual help and feedback to students as she checks their work. She does cue them before the end of the session with a gentle reminder. Once all students complete the work and turn it in, Mrs. Johnson explains the homework assignment. Students may spend several days on the same skill/concept and often Mrs. Johnson uses time left at the end of the period for a game which reinforces the skills presented.

Transition

As students complete an activity, they ready themselves for the next one and flip over the green card. Mrs. Johnson checks for readiness before beginning the next activity.

RESEARCH ON

TIME ON TASK

INTRODUCTION

This research unit is on managing instructional time to maximize student learning. This body of research, known as Time on Task, overlaps the areas classroom management and teaching effectiveness. As such it can be presented either as a unit following the research on Direct Instruction or Interactive Teaching, as shown here, or as the first research unit in the entire training sequence. We presented this unit after the Direct Instruction unit because the findings in the studies summarized here support the Direct Instruction or Interactive Teaching research and because, unlike the other research units, the implications of the findings on Time on Task go beyond the teacher's immediate control within the classroom. While teachers can implement many of the findings, other findings require administrative support. At least initially in the training sequence, we felt teachers ought to be in total control of selecting concepts for implementation and determining their outcome. However, there are some advantages to presenting this research unit first as it introduces the ideas of time on task, and on-task versus off-task behavior. These are expressions which are frequently used in the classroom management and teaching effectiveness research.

The basic concepts presented in this research summary are:

- allocated time
- engaged time
- academic learning time

This research unit can be presented in a 1¾-hour training session, with 20 to 35 minutes for presentation and discussion of the concepts, 20 minutes for an activity, and 30 minutes for the Reaction to Research exercise from the previous session and the Plan of Action exercise for implementing the new research concepts.

RESEARCH ON

TIME ON TASK

One of the most widely discussed concepts to emerge from the research on teaching during the 1970s was **time on task**, or the amount of time students actively spend working on academic tasks. Many educators now feel that increasing student time on task will increase student achievement. While there is considerable research to support this feeling, simply increasing a student's time on task may not be enough to substantially increase learning. **The issue of quality of time or how students spend their time and its relationship to learning is one which has yet to be fully explored by researchers.**

The birth of the interest in time as an essential factor in learning can be traced to John Carroll's 1963 paper, "A Model of School Learning" (Anderson, 1982), in which he linked school learning directly to time. Carroll suggested that learning is dependent upon the amount of time students actively **spend** learning something compared to the amount of time students **need** to learn something. In other words, if a student needs 60 minutes to learn or master a new skill, does this student spend a full 60 minutes working on learning the skill? According to Carroll's model, if this student spends less than the needed 60 minutes learning the new skill, he will not completely master it. Symbolically Carroll's idea is represented by the following equation in which learning is a function (f) of time spent learning and time needed to learn.

$$\text{Learning} = f\left(\frac{\text{time spent}}{\text{time needed}}\right)$$

Considering Carroll's equation, if a student only spends 30 minutes learning a new skill, he will succeed in only half learning the skill (30 minutes spent/60 minutes needed). Carroll also suggested that a definition for student aptitude might be the amount of time a student needs to spend learning a skill in order to master it.

Since the Carroll paper, a number of research studies, conducted at the elementary and secondary level have explored the relationship of time to learning and the use of time in classrooms. In essence these studies have focused primarily on Carroll's concept of "time spent" in learning. These studies largely indicate how time is currently being used in classrooms and suggest how time can be more efficiently used. They also identify those instructional qualities which lead to greater amounts of active student participation in learning or time on task. These studies do not indicate, however, how much time is actually needed by average, below average or above average students to learn something, other than to say that below average students require more time to learn something than average or above average students and average students need more time than above average (Stallings, 1981).

One of the most significant "time and learning studies" has been the California Beginning Teacher Evaluation Study (BTES). The purpose of this study was to identify teaching activities and classroom conditions that foster student learning in elementary school (Fisher, et al., 1980). The study focused on reading and mathematics instruction in grades two and

five. Three important time concepts emerged from the research findings: **allocated time, engaged time,** and **academic learning time.** These concepts are currently receiving considerable attention from researchers, educators and administrators. Two of the concepts, allocated time and engaged time, are concerned with the quantity of time students spend learning. The third concept, academic learning time, addresses the quality of time students spend learning.

ALLOCATED TIME

Allocated time is the total amount of time allocated or available for learning. It can refer to the length of a school day, the length of a class period, or the amount of time scheduled for a specific content area or skill development. Allocated time is a measure of "opportunity to learn." It establishes the upper limit on the time available within school for students to learn.

Findings from the BTES show the amount of time allocated to instruction in a particular content area influences the amount of student learning attained in that area (Fisher, et al., 1980). That is, teachers who allocate more time to a specific content area have students who achieve at higher levels within that area than teachers who allocate less time to the same area. This finding is also supported by Cotton and Savard's (1981) review of thirty-five studies on instructional time. They found that increasing allocated time led to increases in student achievement, especially for low ability students and particularly when the amount of instructional time allocated to teacher-student interaction was increased (See Interactive Teaching Research).

The issue underlying allocated time is whether sufficient instructional time is made available for students to achieve at appropriate levels. The minimum number of minutes per day or hours per week allocated for certain subject areas is usually mandated by the states or school districts. However, the actual allocated time within curriculum areas is often influenced by building level decisions regarding scheduling and the curriculum needs of the students served by the school. Actual allocated time within the classroom, particularly for specific skills is further influenced by teachers' sense of priorities for subject areas and student learning needs.

These factors—state or district mandates, building level decisions, and teacher influence—combine to create large differences in allocated time or "opportunity to learn" time for students within schools and between schools.

Findings from several studies of elementary and junior high classrooms have indeed noted such differences in allocated time. Harnischfeger and Wiley (1978) found that the length of a school day between two second grade classrooms in the same school district differed by 45 minutes. In the National Follow Through Study (Stallings, 1975), first grade classrooms varied as much as 1½ hours in the length of their school day. In a study of secondary schools (Stallings, Needles and Stayrook, 1978), remedial reading classes varied between 40 and 55 minutes in length.

The BTES looked at how class time was allocated for academic activities, including reading, mathematics, science and social studies; non-academic activities, including music, art, storytelling and physical education; and non-instructional activities, in-

cluding transitions, waiting between activities and routine class business. Their findings on the average amount of time allocated to each of these areas is summarized below.

Average Class Time Allocations
THE BTES

	Grade 2	Grade 5
Academic Activities	2 hrs. 15 min.	2 hrs. 50 min.
Non-academic Activities	55 min.	1 hr. 5 min.
Non-instructional Activities	44 min.	45 min.

From Rosenshine, 1980, p. 110
(Note: the average second grade day was shorter than the average fifth grade day due to the number of split classes in second grade—9 to 2/10 to 3.)

In both the second and fifth grade classrooms observed, academic activities accounted for approximately 60 percent of the time; non-academic activities accounted for almost 25 percent or ¼ of the time; and non-instructional activities consumed almost 20 percent or 1/5 of the day. Thirty-five of the forty-five minutes spent on non-instructional activities was due to transitions between activities.

A breakdown of how the academic activity time was allocated to reading and language arts, mathematics, and other academic areas, mostly science and social studies, in the second and fifth grade follows.

Average Time Allocations for Academic Activities
The BTES

	Grade 2	Grade 5
Reading & Language Arts	90 min.	110 min.
Mathematics	35 min.	45 min.
Other Academic Areas	8 min.	17 min.

From Rosenshine, 1980, p. 111

Again, the average amount of time allocated to specific subject areas was proportionally the same for both second and fifth grades. However, Fisher, et al., of the BTES, found wide differences between classes within the same grade in the amount of time allocated to each subject area. For example, the average amount of time allocated for mathematics in the second grade ranged from a low of 25 minutes per day in one classroom to a high of 60 minutes per day in another classroom. The average math

time for all second grade classrooms was 35 minutes per day. Similarly, in fifth grade classrooms, the average amount of time allocated for reading and reading-related instruction ranged from a low of 60 minutes per day in some classes to a high of 140 minutes per day in others. By comparison, the average reading time for all classes was about 110 minutes per day.

Even within reading and math classes, there were differences between teachers in the amount of instructional time given to specific skill areas. For example, during the course of the school year an average student in one second grade class received 9 minutes of instruction on the use of money while an average student in another second grade class received 315 minutes of instruction on the same topic. Similarly, students in some fifth grade classes received an average 1,000 minutes of instruction on reading comprehension throughout the school year (or 10 minutes per day), while students in other fifth grade classes received 5,000 minutes (50 minutes per day) of reading comprehension instruction during the same school year.

Similar differences in allocated instructional time were found in another study of six elementary classrooms in Michigan conducted by the Institute for Research on Teaching (IRT). IRT found the following ranges in allocated time within the same grade level:

SUBJECT	RANGE IN MINUTES PER DAY
Reading instruction	24-84
Language arts	36-67
Mathematics	28-63
Science	0-48
Social science, art, music, physical education combined	14-55

Within-class differences were also observed. IRT found in the area of writing instruction that students in one class were given instructional time only for the mechanics of writing (spelling and punctuation) while almost three-fourths of the instructional time in another class was devoted to the composing process of writing (sentence completion, composing sentences, gathering information for reports). Also, in two of the observed classrooms, non-instructional activities, including lunch, firedrills, classroom interruptions, transitions between lessons, bathroom breaks and social activities consumed as much as 42 percent of the day (151 minutes out of the total 360 minutes).

The findings from these studies indicate that there are substantial differences between districts, schools and classrooms in how much instructional time is allocated for the school day, specific subjects, and specific skills. These differences are significant because allocated time represents a clear measure of opportunity to learn. Students in classrooms which have greater amounts of instructional time have a greater opportunity to learn and achieve more than do students enrolled in classrooms

with less instructional time. Thus, allocated time is an important factor in the effort to provide equal educational opportunities for all.

ENGAGED TIME OR TIME ON TASK

Engaged time is the amount of time students are actively paying attention to instruction or working on a learning activity. It's the amount of time students are on task. While allocated time sets the upper limit on the amount of classroom time available to students for learning, not all of this time is actively utilized by students for learning. There are any number of factors which pull students away from their learning or cause them to lose interest, thereby reducing the total learning time:

- school management practices—unnecessary or untimely public announcements, unscheduled interruptions, visitors, drills, student pull-outs, etc.
- classroom management practices—"jerky" transitions between activities, inefficient routine procedures for distribution and collection of assignments, supplies, etc.
- instructional practices—over reliance on seatwork or other non-interactive instructional styles, poor group focus, lessons which are uninteresting or too difficult.

Thus, engaged time more accurately reflects student learning time. In fact, the BTES found that the more engaged time students have, the more they learn as evidenced by higher achievement.

As with allocated time, the BTES also found differences among classrooms in the amounts of time students were actually engaged. In the second grade, students typically spend 1 hour and 30 minutes engaged in relevant academic activities. This amounts to less than half (40 percent) of the total in-class time. In contrast, second graders in the most effective classrooms spend 1 hour and 55 minutes engaged in relevant academic activities. This means these students effectively have an additional 25 minutes of learning each day. Similar time differences were observed in fifth grade classrooms as well. Students in the most effective classrooms are engaged in learning 35 minutes more each day than students in average classrooms. Compared to the least effective classrooms, the most effective classrooms had students engaged an additional hour each day (Rosenshine, 1980). While the differences of 25 minutes and 35 minutes per day in engaged time between the average and most effective second and fifth grade classrooms may not seem like much, over the course of a school year 25 minutes daily becomes 75 hours and 35 minutes daily becomes 105 hours. If some students are actively engaged in learning for 75 more hours a year than other students, it seems reasonable that they would learn significantly more than other students.

In accounting for these differences in the amount of time students are actively engaged in learning, the BTES identified both instructional factors and management factors which impact on student engagement. The BTES found that highly interactive instructional styles—those with high levels of teacher-student interaction particularly in the form of teacher presentations, questions, answers, feedback and explanations—led to higher amounts of student engaged time. Overall, students were actively engaged (in learning) 84 percent of the time during teacher-led activities

but only 70 percent of the time during seatwork. Particularly disturbing was the fact that seatwork and students working alone was the dominant activity pattern found in the classrooms studied. In fact, students spent about 66 percent of their reading time and 75 percent of their math time doing seatwork. The BTES also found that student engagement dropped considerably lower when students spent almost all of their time (90 percent) doing seatwork.

Thus highly interactive instructional styles (see research on Interactive Teaching) led to greater amounts of student engaged time and subsequently, greater student learning. During group work especially, the BTES found that high levels of teacher-student interaction not only led to higher overall engagement in groupwork but also higher engagement during seatwork. This suggests that the teacher-guided practice and feedback during groupwork better prepares students for seatwork and thus keeps them more engaged during seatwork.

Cotton and Savard's review of research on time (1981) also found that students with high engagement rates in listening, discussing, question answering and other kinds of interactive learning activities achieved more than students with high engagement rates in non-interactive activities such as seatwork. Furthermore, students who were highly engaged in interactive activities had better self confidence and attitudes.

Some non-engaged time is typical of all classrooms. For example, time spent on non-instructional activities such as transitions between activities or following breaks, housekeeping tasks, exchange of papers, distribution and collection of assignments, materials and supplies, and waiting between activities is necessary. While most teachers spend approximately 45 minutes each day on such non-instructional activities, it's clear that good classroom management practices are essential to holding this dead time to a minimum; otherwise it can quickly grow beyond this level and significantly reduce learning time. Consider the following scenario.

Suppose by law, the minimum amount of time required for mathematics instruction in the second grade is 40 minutes each day. Suppose, too, that the mathematics time begins at 11:10, after a recess, and ends at noon. The principal, teacher, and superintendent may well feel that the state minimum requirement is being met and even exceeded by 10 minutes. However, closer examination will reveal otherwise. An 8-minute delay in the start of work on mathematics may occur as students noisily enter the room, stand around talking before taking their seats, calm down and finally get out their worksheets. Another 4 minutes in transition time may be lost during the period as students change from one activity and begin work on another. Toward the end of the allocated time, students are putting workbooks and cuisinaire rods away, getting lunches out and lining up for noontime dismissal. Another eight minutes are lost. Functional time for mathematics is now reduced to 30 minutes, which is 75 percent of the legal requirement. Over the course of a school year, that 10 minutes lost each day from the required time can add up to 1800 minutes or 30 lost hours of required math instruction.

Maintaining time management becomes an important and sometimes difficult skill to master. Even the best

teacher's time management system is often exacerbated by unscheduled administrative interruptions such as announcements over the P.A. system, messages from the office, calls to come to the office, firedrills, student pull-outs, etc. Consider the effect of a simple announcement over the P.A. system. Not only is students' attention drawn away from the lesson to the announcement for its duration, but the momentum of the lesson is altered. Valuable learning time is lost, as the teacher must work to re-focus students' attention and regain the lesson's momentum. The problem can be further compounded by the general temperament of the class as some are more difficult to manage than others. Or, consider the effect of a school rule which requires teachers to be in the hall monitoring students while they pass between classes. By having to be in the hall until the bell rings signalling the start of class, the teacher is unable to provide the necessary leadership to insure that students enter his or her class properly and quickly get ready to start class. Instead, the teacher has to use the first minutes of the instructional period to ready the class. If this is a particularly difficult class which requires a strong, instructional and managerial leader or if the teacher is a poor manager, considerable allocated instructional time can be lost trying to focus the students.

ACADEMIC LEARNING TIME

The third concept, **academic learning time**, is concerned with the quality of time students spend learning. Academic learning time is the amount of time students spend actively working on learning activities or tasks which are of an appropriate level of difficulty. The BTES defines appropriate level of difficulty as one in which there is a high success rate or a situation in which students have a good grasp of the academic task and make few errors.

The concept of success rate is linked to the cyclical nature of learning which is a process of moving from not knowing something to knowing. When new content or skills are first introduced, a student most likely will not understand it completely and will make some errors. Through teacher-guided practice, explanations, feedback and corrections, a student comes to understand the material and makes fewer errors. Additional (generally independent) practice and review help to solidify or consolidate learning. Eventually, the student's understanding reaches a level where he knows the material and performs correctly. At this stage continued practice is of minimal value (Fisher, et al., 1980).

The BTES found that to keep students engaged in learning activities and consequently to maximize student achievement, students need to have a high level of successful learning experiences. Specifically, students who were presented new material or given exercises to work on at a difficulty level in which the students could be expected to succeed 75 percent of the time, achieved more than students who were given more difficult work in which they were successful considerably less than 75 percent of the time. In other words, the more time students spend working on reading and mathematics activities which they can perform with high success (correctly), the more engaged the students will be and the more they will achieve.

The 75 percent success rate figure is more of a "rule of thumb" figure or

general indicator of how well the class and specific students are progressing. The BTES found that lower ability and lower achieving students benefit by having a slightly higher overall success rate, 80-85 percent, while higher ability and higher achieving students benefit by being challenged a little more, experiencing a success rate of 70 percent. The evidence for high levels of successful learning experiences is also supported by Kounin's behavior management research. Recall that he found that students needed to experience a genuine sense of progress in their academic work to keep them on task and minimize their need to seek other forms of diversions in the way of off-task or inappropriate behavior.

The key to designing lessons and student practice with a high success rate is good diagnostic and prescriptive skills. In planning for student success, a caution is raised that the concept does not suggest that students should spend all of their time working on high success tasks. A balance between providing successful experiences and challenging students must be found. The message is to be careful not to over-challenge students to the point where they become frustrated. In particular, a real balance must be found for older more mature students and high achieving students who are skilled in problem solving. These students need successful experiences but they do not need as much time working at a high success rate. Finally, the BTES also found that high success rates contributed to higher levels of student esteem (Fisher, et al., 1980), an especially important factor for lower achieving students.

Implications for Classroom Management and Teaching Effectiveness

The research findings on the wide variance among classrooms in allocated time, engaged time and academic learning time and their impact on student achievement suggest implications for teacher's classroom management and teaching effectiveness skills as well as administratively controlled, school-wide management strategies. In particular, the research emphasizes the necessity of having good classroom management processes and highly interactive teaching styles to maintain student engagement over a high degree of seatwork and independent learning. This section will link some of the findings on classroom management and teaching effectiveness to the specific time concepts.

Classroom Management Research

The difference among classes in allocated time and engaged time are in part due to the differences among teachers in their ability to manage student behavior and their ability to manage time, both their time and students' time, efficiently. Good classroom management skills and strategies help to minimize student off-task behavior.

The Evertson, Emmer and Anderson Beginning of the Year Classroom Management research stresses the importance of planning efficient room arrangements, establishing student behavioral rules and instructional procedures, teaching and reinforcing rules and procedures, assuming strong leadership for the class, and actively enforcing all rules. Planning an efficient room arrangement provides for an easy and orderly flow of student traffic throughout the room and insures a high level of teacher-

student eye contact. A good room arrangement reduces student bottlenecks and opportunities for students to cause disruptions or distract other students who are on-task. It also insures that students moving about the room can do so quickly and easily. Eliminating physical barriers which impede the teacher's ability to maintain a high level of eye contact with students eases the teacher's job of monitoring and helps to keep students on task during assignments or actively attending to the teacher during presentations. High eye-contact reduces opportunities for student misbehavior by reinforcing the idea that the teacher knows what students are doing at all times (see Kounin's research on with-it-ness).

Establishing, teaching, reinforcing and enforcing classroom behavioral rules set clear expectations for student behavior and how they are to operate in the classroom. While this strategy does not eliminate all student misbehavior, the research shows it clearly and greatly reduces the occurrence of student misbehavior or other forms of off-task behavior by establishing an instructionally effective environment in which students know they are expected to enter rooms appropriately and quickly get to work. Not only does this reduce the amount of allocated time wasted due to disruptions, it also reduces the amount of time (and energy) the teacher must devote to handling disciplinary matters.

Establishing and reinforcing effective instructional procedures also serves to create more efficient use of time. For example, one of the contributing factors toward loss of allocated time is inefficient transitions between activities. Having good procedures for entering the room, turning in and handing out assignments, moving to learning stations or groups, etc. reduces the amount of time needed for transitions. Teaching these procedures to students to the point where they become automatic helps them to be performed quickly, quietly and smoothly.

Kounin's research on classroom management identified specific teacher behaviors which promote higher levels of student on-task behavior. With-it-ness refers to a teacher's ability to both actively monitor students' behavior and to communicate this accurate and "omnipresent" awareness of student behavior through her actions to stop inappropriate behavior. By demonstrating that she "has eyes in the back of her head," the teacher sends a clear message to her students that any efforts to misbehave will be clearly noticed and decisively acted upon. In short, for the cooperating student, the message is "why bother?"

Smoothness and momentum refer to the teacher's ability to handle movement within and between lessons, i.e., pacing, momentum, transitions. The teacher's ability to move smoothly from one activity to another and to maintain momentum within an activity serves to keep students' attention focused and on-task, and greatly reduces transition time. Being prepared and managing instructional time so there is a steady flow of activities which keeps students actively focused on instruction eliminates "lulls" or dead time which give students an opportunity to turn their attention elsewhere.

Group focus and accountability also serve to maintain student on-task behavior. Group focus refers simply to the techniques a teacher uses to keep all students within a group ac-

tively attending to the teacher and the learning activity. By structuring activities so as to insure a high degree of student participation, active and/or passive, teachers effectively maintain high student engagement. Accountability refers to the techniques a teacher uses to hold students accountable for doing the necessary work. Setting clear expectations that work must be done helps to maintain student on-task behavior.

Finally, variety in learning activities, especially seatwork is an instructional strategy which helps to keep students actively on task by holding students' interest and reducing boredom. Obviously, if tasks are interesting, students are more likely to work on them to completion.

From this brief overview of the classroom management research, it is obvious that effective classroom management skills and strategies play an important role in maximizing allocated time by preventing most outbreaks of student misbehavior or other forms of off-task behavior and by creating more efficient use of time for teachers and for students. Furthermore, classroom management strategies enhance student engaged time by maintaining student's attention and high interest.

Teaching Effectiveness Research

The differences among classes in student engaged time or time on-task, and adacemic learning time (engaged time in which students are working successfully) are directly related to the teaching effectiveness research. In fact, findings from the BTES and Jane Stallings' research on time and student achievement identify a series of teacher behaviors associated with higher levels of academic learning time and student achievement. In both studies, interactive instructional behaviors or those behaviors commonly referred to as direct instruction are associated with high levels of student achievement while non-interactive instructional behaviors are related to lower levels of achievement. Briefly, the BTES identified the following interactive teacher behaviors associated with higher student engagement and greater learning gains:

- ability to accurately diagnose student skill levels
- prescription of learning tasks appropriate to student's skill levels (high success rate)
- substantive interaction between the teacher and student consisting of oral presentations of new content and skills, asking questions, monitoring of student work and providing corrective feedback about student performance
- structuring the lesson and giving clear, concise directions on task procedures.

Stallings, Cory, Fairweather and Needles (1978) identified a series of strategies for teaching basic reading skills in secondary schools. Essentially, Stalling, et al., found that those teachers who were interactive in their style of teaching, i.e., providing oral instruction, discussion and reviewing students' work, providing drill and practice, asking questions and providing corrective feedback, had students who achieved more in reading than teachers who had a non-interactive style, relying heavily on written assignments and silent reading. A list of specific interactive and non-interactive behaviors follows:

Interactive	Non-interactive
■ Discussion of homework	■ Teacher working on own management tasks
■ Instructions for new work	■ Outside intrusions (visitors, loudspeakers)*
■ Drill and practice	■ Social interactions
■ Students read aloud	■ Student misbehavior
■ Focusing instruction on small groups and whole group	■ Offers students too many options
■ Praise and support	■ Too many written assignments
■ Positive corrective feedback	■ Too much silent reading
■ Short quizzing	■ Too much individual work with or without teacher intervention

*Came up as an unexpected variable as research was being conducted.

Stallings (1981) also found that the distribution of time across several activities during the class period was also an effective strategy for helping students on task. Effective teachers in Stallings studies of secondary schools distributed time in the following ways:

Organize/Management Activities (15%)
- Take roll
- Make announcements
- Make clear expectations for quality and quantity of work
- Clarify behavioral expectations
- Pass papers or books (out and in)

Interactive On-Task Activities (50%)
- Review/discuss previous work
- Inform/instruct (demonstrate/give examples)
- Question/check for understanding
- Reteach small group (if necessary)
- Read aloud/develop concepts

Non-Interactive On-Task Activities (35%)
- Written work
- Silent reading
- Teacher monitoring/guiding

From this brief overview of the time on task research associated with effective teaching, it is apparent that highly interactive teaching styles and teacher-directed learning activities play a significant role in maintaining high student engagement rates and high student achievement. Also, teachers' diagnostic skills, interaction with students, and monitoring of student performance help to insure that teachers structure learning activities at an appropriate difficulty level for students. This leads to greater academic learning time and, subsequently, student achievement.

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RESEARCH ON

TIME ON TASK

A REVIEW OF CONCEPTS

1. **Time on Task** is one of the most popular and widely discussed concepts among researchers, administrators and educators to emerge from the research on teaching during the 1970s.

2. Many educators now feel that simply increasing student time on task will increase student achievement. While increasing the amount of time students are actively involved in learning is important, the more significant issue may be quality of time, or how students spend their time in classrooms, and its relationship to learning. This issue has yet to be fully explored by researchers and educators.

3. In linking learning to time, John Carroll suggested that how much students learn depends on the amount of time students actively spend learning something compared to the amount of time students actually need to learn something.

4. The California Beginning Teacher Evaluation Study identified three important time concepts which impact on student achievement: allocated time, engaged time and academic learning time.

5. **Allocated time** is the total amount of time allocated or available for instruction (or learning). Generally, it refers to the length of the school day, the length of a class period or the amount of time scheduled for instruction in a specific content or skill area.

   Some specific findings:

   - The amount of time allocated to instruction in a particular subject or content area influences the amount of student learning attained in that area. Specifically, teachers who allocate more time to a given skill area have students who achieve higher in that area.
   - Factors which influence the amount of time allocated for the school day or to a specific subject or skill area are: school district policies, building level decisions regarding scheduling, and teachers' sense of priorities for skill development relative to student needs.
   - Studies show there are significant differences in the amount of time allocated for the school day, content instruction and specific skill development between school districts, schools within the same district, and even classrooms within the same school.

6. **Engaged time** is the amount of time students actively spend paying attention to instruction or working on a learning activity; it's the amount of time students are **on-task.** Some specific findings:

   - Engaged time more accurately reflects a measure of student learning

since students may not be actively engaged in learning during any given allocated time period.

- Factors influencing the amount of student engaged time include school management practices, classroom management practices, and instructional practices.
- School management practices which can reduce students' engaged time by pulling them off-task are: unnecessary or untimely public announcements, unscheduled interruptions by visitors, drills, student pull-outs, etc. More effective schools establish school-wide policies with teachers regarding the above which allow teachers to better manage their time by planning for the interruptions during certain times of the day.
- Effective classroom management practices concerning preparations of materials for lessons, smooth transitions between activities, efficient procedures for routine housekeeping chores and instructional tasks, etc. are essential to good time management and keeping students' attention focused on academic activities.
- Highly interactive teaching behaviors characterized by high levels of teacher-student interaction in the form of oral presentations on new material, question and answer or recitation type practice sessions with students, and feedback and explanations lead to higher amounts of student engaged time.
- Studies show there are significant differences between classrooms in the amounts of student engaged time. While the differences of say 25 minutes per day may not seem like much, over the course of a year this difference becomes 75 hours (of learning)!

7. **Academic Learning time** is the amount of time students spend working on learning activities or tasks which are of an appropriate level of difficulty.

   Some specific findings:

   - An appropriate level of difficulty is one in which students have a high success rate or high level of successful learning experiences.
   - The research shows that students who are given the opportunity to engage in learning activities which they can complete successfully 75 percent of the time achieve more than students who are given instruction at a difficulty level at which they will be successful only 50 percent of the time.
   - The more time students spend actively working on reading and mathematics activities which they can perform successfully, the more engaged students will be and the higher they achieve.
   - Research shows a 75 percent success rate seems optimum for most classes (slightly higher for lower ability classes and slightly lower for higher ability classes). This figure is intended to serve as a barometric reading for the class, not as an exact measurement of how many times any given student or all the students answer questions correctly.

8. The research findings on the wide variance among classrooms in allocated time, engaged time and academic learning time and their impact on stu-

dent achievement underscore the importance of having good classroom management practices to maximize the available instructional time and highly interactive teaching practices to optimize students' engagement and achievement.

9. The findings also highlight the important role that administratively-controlled, school-wide management policies play in supporting teachers' time management and classroom management practices.

DIRECTIONS FOR TRAINERS

1

Training Activity
for
TIME ON TASK RESEARCH

TITLE: "Finding the Time" in Elementary Classrooms

OBJECTIVES: To identify classroom routines which may be potentially troublesome for teacher's time management and strategies for performing these routines more effectively

PROCESS: Group Discussion

FORMAT: Large or Small Groups

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read through the activity, and if time permits, write down their answers. Ask the teachers to share their strategies for managing the trouble spots effectively. Encourage the teachers to identify specific strategies for each of the items, particularly the last one on creating learning experiences from routine tasks.

"FINDING THE TIME"
in Elementary Classrooms

Training Activity
for
Time on Task Research

Efficiently utilizing allocated time is sometimes easier said than done. Use the following exercise to take a closer look at your classroom routines to determine which ones you are already performing effectively and which ones you would like to run more smoothly. Share your strategies with others.

1. What are the non-academic classroom routines or tasks that are performed in your class on a daily, weekly, or occasional basis? List them along with an estimate of the time used to complete each routine.

2. Who is currently responsible for performing the above routines? Which routines do **YOU** perform?

   Which routines does someone else perform? (Para, student aide, class monitor, etc.)

   Are there some routines which you are currently performing which someone else could take responsibility for? (There is considerable evidence which indicates that teachers tend to burden themselves with tasks that students can perform.)

3. The research on time management stresses that considerable time can be lost during transition periods between academic activities. What procedures do you use for handling transitions smoothly and effectively?

4. Some classroom routines can be organized to provide learning experiences for students thereby creating learning time from dead time. Consider the following strategy for using student monitors to pass out books and supplies.

   Appoint student monitors to pass out materials. A class chart can be devised to decide **who** are the monitors; **how long** they will be the monitors; and **what** they will be responsible for distributing to the class. (You might also want to consider **how** you distribute materials to ensure maximum use of time.)

   The materials monitors might be required to correlate the daily attendance tally with the number of books and materials needed for different learning assignments, by whole class or by groups. Voila! This routine can become a math and sorting activity.

   ACTIVITY:
   Consider the following classroom routines. Select one or two from the list or another routine from your class and try to think of ways in which these routines could be used to provide academic experiences for students. (You may want to share a routine you've already designed for this purpose.)

   Attendance

   Lunch Count

   Collecting Monies

   Taking Care of Classroom Pets

   Passing Out Materials

   Housekeeping

DIRECTIONS FOR TRAINERS

2

Training Activity
for
TIME ON TASK RESEARCH

TITLE: "Finding the Time" in Secondary Classrooms

OBJECTIVES: To identify potential trouble spots for time management in secondary classrooms and strategies for coping with these problems effectively

PROCESS: Group Discussion

FORMAT: Large or Small Groups

RECOMMENDED TIME ALLOTMENT: 15 to 30 minutes

PREPARATION: Reproduce activity for appropriate number of participants

DIRECTIONS: Have teachers read through the activity, and if time permits, write down their answers. Ask the teachers to share their strategies for managing the trouble spots effectively. Encourage the teachers to identify **specific** strategies for using "others" to help with routine tasks, and for beginning and ending class.

"FINDING THE TIME"
in Secondary Classrooms

Training Activity
for
Time on Task Research

Efficiently utilizing allocated time is sometimes easier said than done. The following exercise focuses on potential trouble spots for time management. Read through the activity, answering the questions as you proceed. Think about the areas you might want to run more smoothly in your class. Share your strategies with others.

A. ROUTINES:

1. What non-academic routines (attendance, collecting and passing out papers, distributing materials, etc.) are part of class time?

2. What routines do **YOU** take care of?

   What routines does someone else take care of? (Para, student aide, class monitor, etc.)

   Are there some routines you are presently doing which someone else could take responsibility for?

3. How do you take attendance?
   Call roll name by name ____
   Scan for empty seats (using seating chart) ____
   Other (using quizzes, assignments, etc.) _____

4. What successful provisions have you made for collecting and returning assignments or materials?

B. BEGINNING OF CLASS:

Because most secondary teachers receive a totally different group of students every 45 to 60 minutes 5 or 6 times a day, the "beginning" of class occurs more often than in elementary rooms and this "transition" is more dramatic. Therefore, it becomes a potential hazard for wasted time.

How soon after the "official" start of class do you begin?

What kinds of "activities" could prevent the class from starting on time?

Do you have routines at the beginning of each class or while students are entering which help to ready students and focus their attention while you take care of necessary administrative tasks or prepare to begin? (Examples: journal writing, picking up materials, copying assignments, etc.)

What has been successful for you?

An Anecdote:

A secondary teacher could not understand why she had problems maintaining her 5th period on task as efficiently as other classes. Her frustration pervaded the whole period, losing a lot of time. After examination of the possible contributing factors, she realized that 4th period was her lunch time and she was getting to class at the same time as the students. In her other classes, she was already there waiting for students and using passing time to regroup. When she realized this, she re-organized her time. Without giving up her lunch time, she made sure she was there to greet students and start the class on time. She reports that it has made a significant difference in student on-task behavior and has lowered her frustration level greatly.

C. ENDING CLASS:

Secondary classrooms frequently have fewer transitions during any one period than elementary classrooms since the number of activities is limited by the short time. A potential hazard toward the end of a period occurs when the class finishes the planned activities with time left, but insufficient time to start something else.

What are some successful ways of utilizing this "end of class" time?

D. What "school" factor poses the greatest problem for you and your colleagues in relationship to time use?

The System Largely Depends on People in Their Fifties

Adult Life Cycles and Teaching

DON ROBERTS

In English Journal

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ADULT life cycles have a definite effect on teachers and their teaching. Recognizing the phenomenon of adult life cycles and a generalized understanding of the dynamics of change in the adult can lead to improved communication among teachers, teachers and administrators, and teachers and students.

Until recently adulthood was considered to be a kind of developmental plateau on which age rudely intruded. Educators and psychologists explored childhood and adolescence, but until Eric Erikson began publishing his findings, adulthood was regarded as a static and featureless psychological landscape.

Contemporary psychologists believe that adult development occurs according to a generally predictable, age-grouped timetable. Underlying each person's individual differences are basic governing principles of development. Advancing from one adult stage to the next means meeting specific developmental tasks. Ignoring the challenges and crises inherent in the life cycles can stifle normal development during the early and middle periods.

What designates adulthood is subject for debate in itself. It would appear that the only way to arrive at any one acceptable definition or description of an adult is simply to assign a chronological age as the boundary between adolescence and adulthood.

Becoming an Adult, or the Terrible Twenties.—The 20s is a period of impatience and idealism. "Now" becomes an obsession and change must be quick. Those in their early 20s are infatuated with ideals but have not experienced and observed enough life to provide a workable basis for them. This contradiction often leads to impetuous behavior which is regarded by authority figures as rebellious and by adolescents as patronizing. Young teachers caught in an age bind, where they are too young to identify with their colleagues and too old to identify with their students, suffer from isolationist feelings of nonacceptance.

The young teacher's adherence to idealism will often translate in teacher-student relationships as an

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overestimation of fact. Young teachers frequently overestimate their students' abilities, which is a fine error with optimistic implications. But eventually there is a souring effect. "Why can't the little savages appreciate poetry?" "When I give them freedom, why do they climb the rafters?" "They just don't want to learn!" Temperance becomes just temper.

In contrast, older teachers tend to underestimate. Their pessimism is sometimes poisonous to the enthusiasm of their students, but has a positive effect on the teachers themselves. When a student does transcend the norm, it comes as a pleasant surprise.

Crucial to the passage into adulthood is *The Dream*—each young adult's imaginings of himself in the world. *The Dream* is usually cast in an occupational context. To help realize their dream, many people in their 20s seek someone one or more decades older who takes the young fledgling under his professional wing, shows him the ropes, imparts advice, and, most importantly, bestows his blessings.

The need for mentors in the education field is difficult to repudiate, yet there is little or no concerted effort by most school districts to encourage such a relationship. It is, however, a relationship which could be easily arranged. Unfortunately, mentors in this field are a rare species, basically because many likely candidates are so conscious of protecting their own positions that they will not risk being identified with the "foolish" young.

The Thirties: the Transition Period.—By the time a teacher reaches age 30, young kids, teenagers, even college students seem remote and untouchable. Yet the early 30s are marked by turmoil and confusion reminiscent of adolescence. The major difference between the teenager and the 30-year-old adult is that the adult is too tired and cautious to be rebellious—he is simply confused.

By the mid-30s most adults are in a period of transition and turmoil. Painful self-reflection resurrects nagging doubts: "What is life all about now that I am doing what I am supposed to be doing?" Self-deception about the adequacy of both marital and career choice is a common element of the 30s. Often they feel whatever they did for the last 10 years is suddenly wrong. At this point, they frequently change their jobs, or spouses, or seek solace in a bottle (or all three) in a desperate attempt to mollify doubt and coddle insecurity.

In the late 30s the obsession suddenly switches from ideals to pragmatics. At 35 we become systems people. The activists of the early 1960s are now writing memos, punching their time clocks, and worrying about what color to paint the trim. The energy once devoted to changing the system is now locked in on overtime, deadlines, and upward mobility.

The Forties: Dull Realization,

or the Downhill Drag.—At this point successes seem hollow and bittersweet. Many jobs, including teaching, lose their challenge. The 40-year-old has learned the rules, knows the game thoroughly, and can play it blindfolded. Life's main ingredient is a gnawing predictability. Ideals are suspect and new concepts seem like romantic vagaries and vacuous notions. Death becomes real and heavy.

Change is vigorously opposed while the 40s person valiantly strives against mental turmoil, aging, and bodily decline to preserve the certainties of the past. The 40- to 50-year-old teacher usually has a repertoire of standard, glib responses to the 25-year-old teacher's dissatisfied mutterings and naive revolutionary concepts. More often than not what results between the two is not a dialogue, but two separate interlocking monologues.

After Fifty: Mellowing, or the Golden Age.—At the 50th year the human is entering the era of stabilization. There is not necessarily any personal resolve; *The Dream* may be as amorphous as ever. But there is a sense of total self-acceptance and tolerance of others. There is no looking back nor dwelling on morbid reflections, and the paranoia associated with the future dissolves into the fluid warmth of the present.

The 50s person is interested in and concerned with world events, familial relations, interpersonal contacts, and his job, but he no longer reacts. He can afford to be philosophical without also being cynical.

The survival of any system, including the school system, largely depends on the 50s people. It is at 50 and beyond that many teachers become the "master" teachers, teachers who support the system without pandering to it. They have learned to be honest and forthright without being inflammatory. Fifty-year-olds do not so much control others as they establish, by their own example, an emotional climate conducive to harmony.

It is during this last adult life cycle that people become aware that life does not so much require "to be made sense of" as it requires that "its incomprehensible nature simply be accepted."

The adult life cycle researchers are years, perhaps decades, away from arriving at a thoroughly detailed portrait of adult development. Obviously the idea of an adult life cycle can be applied only within the widest scope and broadest range of interpretation. However, to deny the orderly progression of developmental stages in the adult is to ignore a vast perceptive field in the dynamics of man.

To admit and come to terms with the realization that adults do go through dramatic change is to begin a reasonable and logical reevaluation of our social structures.

As Margaret Mead suggests, it is not enough simply to learn about each other. To survive we must also learn for and from each other. □

Free The Teacher

Laboratory helps educators break the bonds that restrict their teaching time.

by Mary Saily

Mary Saily is editor of Educational R&D Report.

Everyone knows that student achievement is directly related to the amount of time teachers devote to instruction, right?

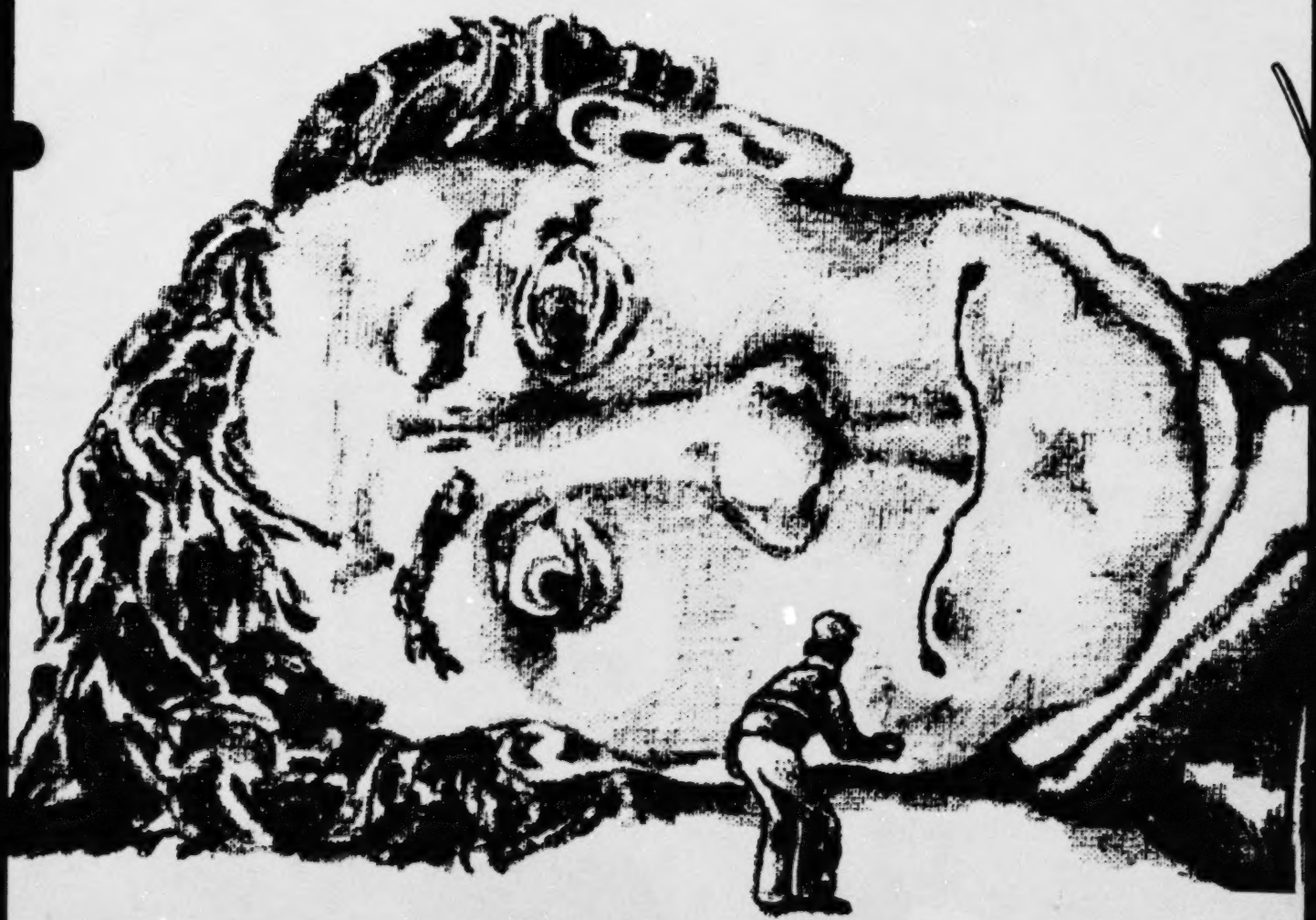
But, as most teachers realize, raising achievement isn't as simple as increasing the amount of time allocated to a subject. Recent research studies, in fact, have revealed a more complex relationship between instructional time and student learning. The most noteworthy is the Beginning Teacher Evaluation Study (BTES), described in the Fall 1979 issue of *Educational R&D Report*.

The study showed that besides the time allocated to instruction, two other factors are important to achievement: the amount of time students actively engage in learning, and the degree of success they experience while learning.

To increase student achievement, the study suggested, teachers must:

- ☐ make good use of time allocated to instruction;
- ☐ increase the percentage of time that students engage in learning; and
- ☐ assure that students spend more than half their time working on tasks that provide high success.

Translating this "formula for success" into practice, unfortunately, isn't easy. But approximately 100 schools working with Mid-continent Regional Educational Laboratory (McREL) are dem-



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onstrating that it can be done.

Studies point way to success

"After the BTES results came out, many educators in our laboratory's region asked us to help them translate the findings into practical steps for improving teaching and learning," says C. Larry Hutchins, deputy director of McREL. "We began this task by taking a look at what research has to say about increasing Academic Learning Time."

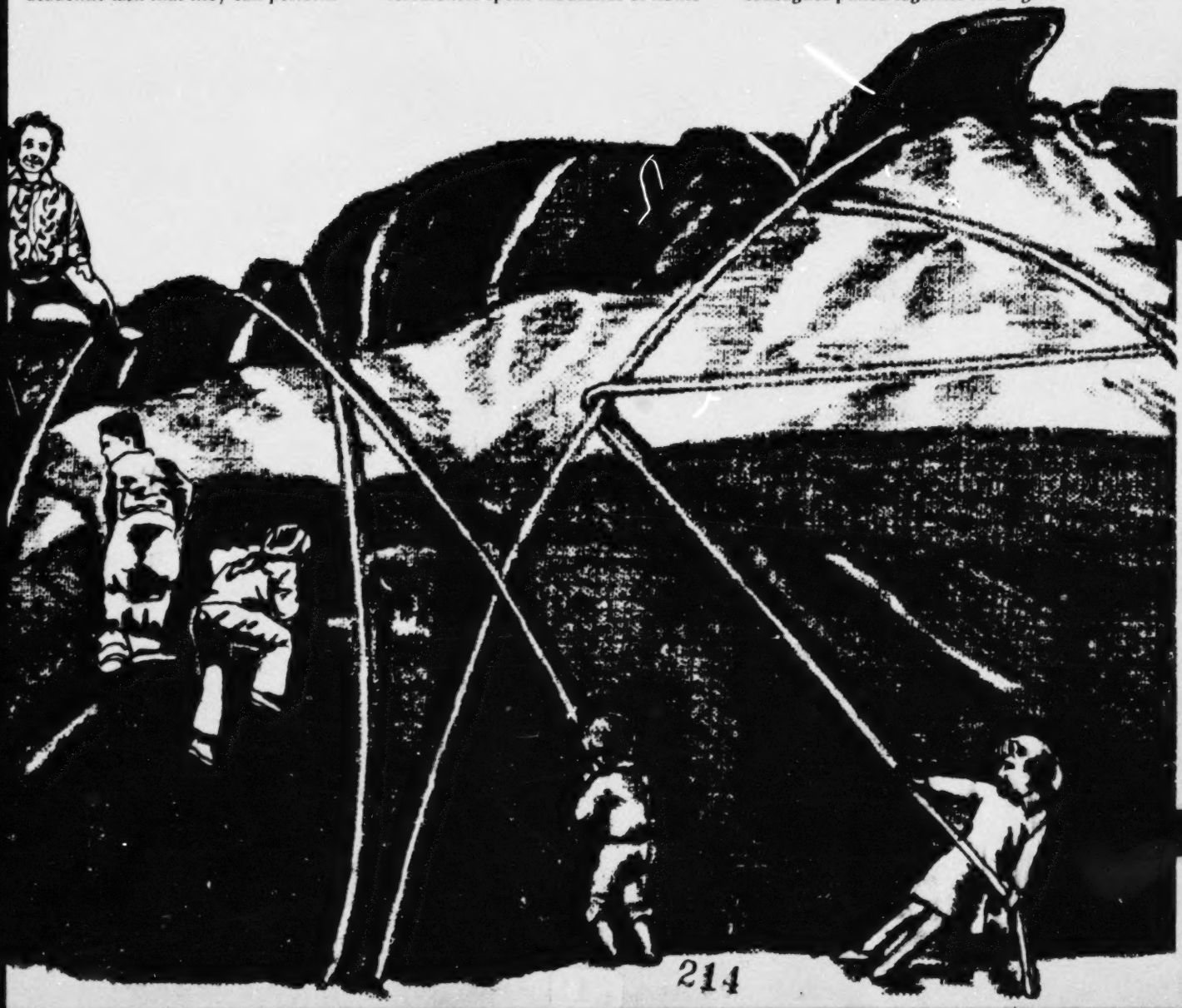
Academic Learning Time, or ALT, is the term researchers at Far West Laboratory coined to describe the amount of time students spend engaged in an academic task that they can perform with a high degree of success. The more time students spend actively engaged in such tasks, the more they learn.

"We found that many research studies on classroom conditions and student learning offer clues about how to increase at least one component of ALT," Hutchins continues. "Interestingly enough, most of these studies come from the regional laboratories and university-based r&d centers."

One example is research conducted by Carolyn Evertson and colleagues at the R&D Center for Teacher Education at the University of Texas. These researchers spent thousands of hours observing differences between effective and ineffective teachers. A major finding was that teachers set the tone for the entire year during the first days of school.

"Teachers who immediately establish and teach classroom rules run classes in which more time is devoted to instruction throughout the year," Hutchins notes. "Obviously, then, one way to improve learning is to help teachers develop effective strategies for operating their classrooms during the first few days of school."

After searching for similar clues on how to increase ALT, Hutchins and his colleagues pulled together findings



from a variety of such studies and developed a workshop series in which to present them to local educators.

Educators like it

How the workshops are put together and just which topics are covered, though, depend on the requirements of the schools involved. That's one of the features that appeals to local educators.

"What I appreciate most is that a lot of good information is included, but we can pick what we're ready for," says Jim Meszaros, principal of Meadowbrook Elementary School in Rapid City, S.D. He and a team of teachers from his school participated in a workshop series that began early in 1981.

"The McREL staff assume that participants are professionals with skills," he continues. "No one is saying 'We've got the answers and here's what you *have* to do.' Instead, the attitude is 'Here's some information that you can apply to make your school better.'

"With this approach, we can pick and choose, and build on what we've already got."

One area that Meszaros and his team targeted for improvement was the way teachers manage their classes during the first days of school. Prior to the opening of the school year, the team arranged a day-long inservice for the entire school staff based on the research they had learned about earlier from McREL. The workshop incorporated specific strategies for teaching classroom rules to students and managing instruction and behavior during the first days of school.

Meszaros claims a clear success for his staff.

"During the first three weeks of school, every one of my 28 staff members commented on how smoothly their classes were going compared to previous years," he reports.

He also notes that during this time period only one student was referred to the office because of a discipline problem. "Now that's unusual in a school of 656 kids," he adds.

"We don't have statistical proof that improving the way we've run classes during these first weeks has resulted in an immediate increase in our student's ALT," he continues. "But we believe it will. There's simply more time for

instruction. We're now a month into the school year. And our judgment is that we're three weeks ahead of where we were at this time last year."

Schools undertake improvements

The McREL workshops thus help teachers and administrators increase ALT. Before they can begin, though, school staff members need to know just where they now stand.

"We begin by giving participants a means of looking at themselves and their students," explains Hutchins. "Participants calculate the amount of time they devote to instructional activities during the typical school day. They learn how to observe one another's classrooms to determine the percentage of time students are engaged in learning. And they analyze student success rates on different types of assignments for each subject matter area.

These written assessments are actually modifications of some of the questionnaires and observation procedures developed, tested and refined by the BTES researchers. McREL staff analyze the results and return the "scores" to individual teachers or formulate a composite score for the school as a whole.

Once teachers and administrators have a fix on the time they devote to instruction, their students' engagement rates and their success rates, they can decide what areas to target for improvement. The rest of the workshop presents strategies in three areas—classroom management, building management and student testing—that can contribute to increased ALT.

Covering all these areas might seem like too big a job for a workshop. Actually, though, the McREL workshop series is really a school improvement process that typically involves four one-day sessions spread over a period of several months. Between each session, participants carry out "homework" assignments in their schools.

The workshop series is generally conducted for a school district or group of schools within a district. Each participating school sends to the workshop a team of the principal and two or three teachers; a central office staff member is also involved.

"Teachers, of course, play the primary role in increasing students' ALT," says Hutchins. "But research on school improvement shows that central office support and principal leadership are also essential."

Principals are particularly important. They are responsible for ensuring that their team carries out the improvement effort for their building. This means developing a way of sharing knowledge gained at the workshop sessions with the rest of the school staff. Equally important, some improvement strategies, such as ways to decrease student disruptions, must be initiated building-wide to be successful.

"Dealing with behavior problems robs teachers of valuable instructional time and is responsible for low ALT in many classrooms," says Hutchins. "Yet discipline is not just a classroom concern. Principals, and even parents, often become involved in the disciplinary process. To ensure that unacceptable behavior is handled consistently and effectively, it is critical to implement a school-wide policy. Everyone should know what the rules are and how they're enforced."

Climate for learning key

Hutchins goes on to point out that discipline is just one aspect of a school's climate that may affect ALT.

"A recent study from England proves that what school a student goes to and what goes on at that school does matter," he says. The study is called *15,000 Hours* because that's approximately the amount of time a student spends in Britain's schools.

According to Hutchins, the study is important because it rejected the usual measures of a school's success, such as the amount of money spent, the number of books in the library and the academic degrees the teachers hold. Instead, the researchers looked at such factors as:

- ☐ the amount of emphasis placed on academics;
- ☐ the consistency with which common goals were shared by teachers and communicated to students;
- ☐ teachers' engagement in student learning;
- ☐ appropriate use of rewards; and
- ☐ the degree to which students participated and shared responsibility.

"Schools that did well on *all* these dimensions of schooling produced students with much higher academic achievement, fewer discipline problems and better attendance," says Hutchins.

Based on the study, McREL staff have constructed an "Academic Indicators Survey" that helps educators focus on those characteristics and conditions that the study says have the greatest impact on student achievement. The survey is completed by all the staff of schools that participate in the McREL workshop series.

Each of the 28 items in the survey allows staff to rate the degree to which a particular characteristic is true for their school. And for each item a list of "evidence" provides a concrete basis for making judgments. A sample characteristic is "Disruptions of classroom instructional time are minimized." One of five pieces of evidence is: "Noise levels in the hall are low." Staff members not only rate the characteristic but check the pieces of evidence they consider most important. Space is provided for adding other indicators.

"The survey results give schools a valid basis for deciding which areas to tackle first," says Hutchins. "If a high percentage of staff says student disruptions are a big problem, for instance, well, that's hard to ignore."

Class management affects ALT

Although the McREL workshop series aims at school-wide improvement, many of the activities focus on the classroom because that's where most learning actually occurs.

"The way classrooms are organized and managed," says Hutchins, "determines not only the amount of time available for instruction but whether kids successfully engage in learning. Several research and development projects offer strategies for streamlining and improving classroom organization, and increasing student motivation."

"A good example of the latter," he continues, "is Student Team Learning, a program developed and tested by the Center for Social Organization of Schools at Johns Hopkins University. This program encourages kids to tutor one another, increases their involvement in learning, and raises achievement levels."

Information about such strategies is presented in the workshops. Topics

include ability grouping of students, whole-class instruction vs. independent work, motivational techniques, reward systems, strategies for dealing with discipline problems, and the relationship between achievement and teachers' expectations of students.

Research conducted by McREL's staff shows, for instance, that students get off task during independent learning easier than during whole-class instruction.

"But independent learning shouldn't be abandoned just because it can result in kids goofing off," states Hutchins. "In fact, teachers can use independent learning activities to meet individual needs and improve the amount of success students experience, provided they help kids stay on task."

Materials developed at Far West Laboratory, he explains, spell out ways to help students of different ages remain on task while working alone. Suggestions include: explaining to students what independent learning means; defining rules for working alone; clarifying what's to be learned; identifying and discussing problems that might arise; setting up routines for when students are finished with their tasks; developing in students the expectation of a delayed teacher-response to their work; and evaluating with students their success at independent learning.

"In other words, teachers need to recognize that children must be taught to work alone," says Hutchins. "And teachers must treat independent learning as serious business. If they do, their students will, too."

Testing procedures questioned

Besides covering both building-level and classroom management strategies for increasing students' ALT, the workshop incorporates information on testing.

"Schools are traditionally judged through students' performance on tests — usually nationally normed, standardized tests," says Hutchins. "But a lot of evidence suggests that standardized-test results are a poor indicator of school success."

Hutchins explains that a recent analysis by the Institute for Research on Teaching at Michigan State University has shown that 30 to 40 percent of the items on leading tests are not covered by major commercial textbooks at the same grade level. Yet teachers are guided primarily by the textbooks they use.

"If schools intend to improve student achievement by increasing ALT, they need to take a second look at the way students are evaluated," he says. "It's not possible to have a clear picture of a school's effectiveness unless tests cover what's taught."

Of course, teachers and building-level administrators generally find it impossible to develop alternative evaluation systems. Such changes usually require district-wide action, which can take several years.

"Instead of developing a new testing procedure," Hutchins notes, "school staff must often make the best of what they have and increase its validity for measuring what they're teaching. So our workshop participants learn how to assess the content of tests, how to make sure that what they're teaching conforms to what they're testing, and how to improve their students' test-taking skills."

Junior high principal comments

The McREL workshop series thus offers teachers and administrators a solid, research-based foundation on which to build a total school improvement effort. It provides tools for assessing current practices as well as strategies for improving building management, classroom management and student testing procedures.

Although this approach to improvement is most applicable to elementary schools, some secondary schools have participated as well.

"Not all the research knowledge presented is applicable to all the subject areas taught in junior high," says Vince Henderson, principal of South Junior High in Rapid City, S.D. "But it's extremely valuable for subjects like English, social studies, reading and math.

"Some of our teachers have changed their entire teaching format based on what they've learned," he continues. "And even those who haven't found the research particularly applicable to their subject — industrial arts teachers, for instance — have reported that they've applied certain techniques to their situation."

Henderson comments on the McREL improvement strategy. "Often such workshops offer a lot of theory. Not so with McREL staff. They spell out good, practical applications."

According to Hutchins, these comments are consistent with what other participants say. "Evaluations of the workshops show that educators believe they're an effective approach to school improvement. We hope to further prove the process works through a formal field test with the Mapleton School District north of Denver," he adds. This year, McREL staff are conducting a research project with six schools in the Mapleton area to determine how the workshop series affects teacher behavior and student achievement.

You can participate

The Mapleton and Rapid City teams are among more than 100 that will have started or completed the workshop series by the end of the 1981-82 school year. The teams come from schools in the region served by McREL. With offices in Kansas City and Denver, McREL is a regional laboratory that works primarily with schools in seven states: Colorado, Kansas, Missouri, Nebraska, North Dakota, South Dakota and Wyoming. However, McREL staff are willing to conduct the school improvement workshops for schools in other states on a cost-recovery basis.

Typically, this would first involve discussions that might lead to a half-day awareness workshop for a group of schools or an entire district. After the awareness session, school and district staff would decide whether or not to proceed. The workshop can be packaged to meet different local requirements.

Much of the research covered in the workshop has been reported in the Summer 1981 issue of *Noteworthy*, a magazine produced by McREL for distribution in its region. Single copies are available for $3.

To order a copy of *Noteworthy* or to find out more about the workshop series, contact Hutchins, deputy director of the Mid-continent Regional Educational Laboratory, 1800 Pontiac Ave., Denver, CO 80220; 303/399-9285.

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David Berliner was director of California's Beginning Teacher Evaluation Study, the prime source of today's attention to time-on-task. In this interview with Executive Editor Ron Brandt, Berliner claims there's one best way to make teachers more effective.

On Improving Teacher Effectiveness: A Conversation with David Berliner

Q What's been your experience in helping teachers use the research on teacher effectiveness?

Berliner: I've tried to disseminate knowledge by making presentations, but that seemed to have very little impact. The times I've gone into classrooms, though, what I did and said meant something to teachers and it made a difference. We could chart the changes. So my experience is simple: the research on teacher effectiveness gets used when somebody works with teachers in their classrooms. There's no substitute for what Bruce Joyce calls "coaching."

Q: What is that like? Exactly what do you do?

Berliner: Take the major variable of "engaged time." I asked teachers in a district near Tucson if we could send graduate students into their classrooms to take some records of their functioning and feed it back to them. The graduate students had learned how to code engaged time, transition time, wait time, and so on. They coded and graphed data from three, four, maybe five visits. Then they sat down with the teacher and had a conference, using some very precise consultation techniques developed by Professor John Bergan of the University of Arizona.[1] Bergan's approach is designed to elicit from the client both a statement of the problem and a statement of intent to change it.

When the teachers had defined their problems and solutions, the consultants—the graduate students—took some more measures. Five of the six classes showed remarkable change; they went from 40 or 50 percent on-

David Berliner is Professor of Educational Psychology, University of Arizona, Tucson.

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task time up to whatever goals the teachers had set—70 or 80 percent. The only exception was a mathematics teacher whose time-on-task was about 40 percent. That teacher said, "Fine, that's all I want it to be." At that point, we had nothing more to do. Teachers have to make those decisions.

Q: That indirect, consultative approach seems inconsistent with the image of direct instruction.

Berliner: It's indirect in the sense that we don't tell teachers what their problem is or how to solve it. It's coercive in that we never leave an interview without a statement of the problem and either a proposed solution or the teacher's statement that he or she doesn't want to change.

Q: How does setting a goal lead to improvement?

Berliner: Let me give you an example. I might say to the teacher, "Your time-on-task in mathematics averages 43 percent over the five days we observed. How could you bring it up?" The teacher might say, "Okay, let me think. Maybe, because I'm grading papers when they're doing their math workbooks, I'm not monitoring them enough."

"Terrific. Why don't you take some breaks from your grading of papers and wander the classroom a little bit. Let's see if that has an effect."

So we collect data as the teacher increases his or her monitoring. Well, we happen to know that works. If the teacher is roaming the classroom, attending rates are higher.

Another thing the teacher might say is, "When kids are through with their assignments, I'll have other assignments ready so they'll have something to work on."

In our consultative model, the consultants learn eliciting questions like, "What can you do to accomplish that?" "Is there any other way you can use resources?"

Q: Wouldn't it be simpler just to tell a group of teachers some of the common problems and some ways to make better use of time?

Berliner: Teachers already know these things; they've heard about them in methods courses; they've been preached to. But nothing happens until someone gets the teacher to specify what he or she is going to do, and then monitors and helps the teacher look at the effects.

Q: Considering all the things teachers need to be concerned with, how important is time management?

Berliner: Probably 50 percent of all teachers don't have to worry about time *allocation*. But the other 50 percent ought to look at it. And half of them—25 percent of all teachers—are probably badly under-allocating time in some areas of the curriculum. We have evidence that the actual time available for instruction in reading and math in some elementary classrooms may total less than 100 hours. That strikes me as a gross misuse of time. So I'd say that as many as one-fourth of the teachers in this country could make marked improvements in instruction by just looking at time allocations.

Beyond that, maybe 70 percent of teachers could be helped by attending to *engaged* time—how time is used. Whenever managers in the business world do time audits, they find ways to save minutes. And that's true of teaching. For example, when the Austin, Texas, school district took this concept seriously, they found ways to save the equivalent of 10–14 days of school, worth $2–3 million.

"But nothing happens until someone gets the teacher to specify what he or she is going to do, and then monitors and helps the teacher look at the effects."

Q: Determining engaged time involves making judgments about whether students are doing what they're supposed to be doing. How can an observer tell whether students are on-task or not?

Berliner: Young kids have no guile. To observe on-task or off-task behavior in kids third grade or under is easy. You and I could sit in the back of the room, come up with some rules in about ten minutes, and show almost perfect reliability all day long. Young kids either are or are not on-task and you can tell. If they're off-task, they're dancing, tapping their pencils, chatting with friends, and so on. They're on-task if they scrunch up their faces and hold their pens and pencils tightly. You can almost see them thinking!

As students get older, you begin to see "anticipatory graduate student behavior": head-nodding, smiling, note-taking, and other signs of attending.

You may code this as on-task, but in your heart of hearts, you know the kid's not processing anything. The opposite occurs with the kid who's looking out the window: you code him off-task even though you're pretty sure he's processing everything. Because of this, we decided that with older students, individual data may be faulty, but the means for classes or groups are still valid. There are probably as many students off-task that we coded "on" as on-task that we coded "off." So once you and I agree on some coding rules, our inter-rater reliability would be about .95 at virtually any grade level.

Q: Are you suggesting that principals and central office supervisors should concentrate their staff development efforts on in-class coaching?

Berliner: I sure am. I think they should bring in fewer speakers and instead have somebody in classrooms helping teachers make changes.

Q: But that's a very time-consuming approach. With fewer people in supervisory roles can we really expect them to do coaching?

Berliner: They won't get much change unless they do. I'm convinced that the number of people who will change by exposure to books and lectures and workshops is just too small.

Q: How would someone who's already a principal or supervisor learn more about consultation skills?

Berliner: Well, Professor Bergan's model takes time to learn because it involves asking questions that do not prompt but elicit. Becoming expert requires many practice sessions, as well as analyzing transcripts of those sessions. It's extraordinarily useful, but very technical. But there are other consultation models: Meredith Gall and Keith Acheson[2] have one, and I'm sure there are others.[3] The behavioral one appeals to me because it puts the responsibility on the person being counseled.

Q: How confident are you that this is what is implied by the term "coaching"?

Berliner: A precise definition isn't necessary. What's important is that somebody who knows the skills in question is in the classroom and provides feedback. Just as a batting coach might say, "Spread your legs a little farther apart," or "Hold the bat a little higher," a teaching coach might say, "You had the opportunity at that point to ask an analytic question and you didn't. Let's figure out why."

Q: That kind of statement is part of the consultative model?

Berliner: Not during the time of eliciting solutions. At that point you'd only say, "Here's the data. Is this what you want?" If the teacher says, "No, I want to change," you say, "Okay, how can you change?" The teacher might say, "I'm going to try to ask analytic questions." Then you can follow up by watching and saying, "Here was an opportunity to ask an analytic question. Why didn't you?"

What I exclude from coaching is walking into the classroom and saying, "You're deficient in analytic questions. I'm going to tell you how to do it." That strikes me as the wrong way to work with professionals.

Q: Must the consultant be an expert teacher?

Berliner: Coaches may not have to be superior teachers themselves, but they must know good teaching. I'll use another analogy. We all marvel at the Olympics when somebody does a very complex dive and the judges hold up scores within three tenths of a point of one another. It happens because every one of those judges knows how to analyze a dive. Even though the dive takes only 1.8 seconds, they have coded 30 different aspects of it—entry into the water, where the legs were, whether the rollover was correct, and a lot of other things that experts know and novices don't. They're connoisseurs of diving. We need connoisseurs of teaching.

Q: What else besides time allocation, engagement rates, and time management do you watch for when you're observing classrooms?

Berliner: One thing is the match of the instructional materials to the goals of the school or district. For example, if the district says second grade kids should learn two-column addition, I look for whether there's two-column addition going on. I check the teacher-made materials to see if they're congruent with the expected goals, because lots of teachers work very hard making their own materials, some of which are good and some which are not. I've seen teachers put a lot of effort into producing units that are irrelevant to the goals of the district.

Another thing is classroom management and discipline. If the class is not learning because the teacher's time is being taken up by two or three kids, that has to be dealt with.

I also look for politeness and kindness. Classrooms should conform to a model of what a democratic workplace

is like: the teacher is in charge and the kids have work to do. But they should be able to talk to each other about their assignments, there should be some choices, there should be consideration.

Q: These things you look for—are they based on research or are they simply common sense and personal values?

Berliner: They're really extrapolations from research. We don't have research that says polite classes do better, but we do have research that says observers' ratings on a scale of one to ten for "How willing would you be to send your own child to this place?" correlate pretty well with school effectiveness indicators.

It takes a connoisseur of classrooms to know what that means, just as it takes a connoisseur of wine to know a full-bodied wine. You can't define an effective classroom precisely, but I can point to some things: there's laughter and the teacher doesn't bother with it, doesn't say, "Quiet." If it goes on for ten minutes, though, the teacher does; there are limits.

Kids should learn that school is fun *and* school is work. Classes that are high on academic engaged time do better. Classes that are high on conviviality also score higher.

Q: There's no inconsistency, then, between what you like to see and what research says you should be seeing?

Berliner: No. The only time I hit an inconsistency was on the issue of success rate. I didn't believe very high success rates were necessary for kids to learn. I thought kids should be "stretched." The data changed my mind on that. It changed Barak Rosenshine's and Jere Brophy's minds, too. Now, we're all saying—especially for young kids and slow learners—that high success rate is important.

Q: You also seem to be saying that test scores aren't the only measure of teacher effectiveness.

Berliner: Effectiveness can be defined that way, but I don't think you can avoid certain moral concerns. If a school produces achievement better than other schools but its suicide rate for teenagers is higher, is that a price you're willing to pay? We have evidence that there are schools like that.

We need at least two criteria for judging schools: we have to see them as work places in which society expects certain things to be mastered. But schools are also places where young people spend important parts of their lives—so they should be enjoyable.

Q: But time-on-task research can be misused if educators aren't concerned with both criteria?

Berliner: Sure.

Q: Are you worried that some administrators may in fact be abusing the idea of time-on-task? That their singleminded devotion to improving test scores may be at the cost of other outcomes?

Berliner: I don't think so. I haven't heard of any real abuses. History may look back on these times and say there were some; I don't know. The administrators who adopted scientific management principles in the 1920s probably didn't feel foolish even though history says they did some of the stupidest things possible. I don't know what a Callahan[4] would say about the current back-to-basics movement, but my feeling is that for the most part we're reasonably well-balanced.

If American schools have gone overboard, it's in the direction of an educational smorgasbord: smatterings of knowledge and low time-on-task. We ought to take more seriously the outcomes we want.

Q: Your comments seem a bit paradoxical. You've said supervisors need to recognize that teachers have goals of their own, so they can best be approached by asking, "How can I help you accomplish your goals?" Children have goals as well, but the time-on-task researchers say effective teachers don't waste time involving students in decision making. They tell kids what the goals are and get on with teaching them.

Berliner: You've tapped right into a basic educational philosophy of mine. I believe the amount of choice you should give kids in school looks like an inverted pyramid. It should be very limited in the first few grades, but maximal in the last year or two of high school. In the early grades where basic skill acquisition is taking place, we should offer whatever opportunities for choice are reasonable—because that's the way we should treat human beings—but in fact, the expected outcomes of education are quite clear at that level; there aren't a lot of choices. We shouldn't be hypocritical about it; kids are there to learn to read and write and do math, and a school has failed if large numbers of its kids can't do that by the end of elementary school.

But schools have also failed if that's all students can do at the end of 12 grades. Once they've acquired basic literacy, students should begin making choices about their own education.

Q: There are early childhood classrooms that are very impressive in the amount of freedom children are given and the amount of self-control they develop. In some of those classrooms the kids continue to work even when the teacher leaves the room. Yet those classrooms tend not to produce the highest standardized test scores, at least in the short run. Wouldn't it be wrong for a supervisor to come into that kind of classroom and report data about how the kids are not quite as much on-task as they would be if the teacher stood up in front and said, "Everybody listen to me"?

Berliner: If the teacher has a good system working and we're talking about a few lousy items on a standardized test, I'd leave the teacher alone. If the class is at the 20th percentile but predicted to be at the 60th, the teacher has somehow missed the boat.

The kind of classroom you've described is wonderful, but among teachers who have tried it, more have failed than succeeded. You can get teachers to succeed more easily in a direct instructional model than in an open model. So if I have to make a choice, and only 10 percent of the teachers can pull off the more open kind of classroom, while 90 percent fail—and I think the rates are pretty close to that—I'm going to try to redirect some of them into a more structured situation. That way, kids won't be cheated of their education. But for the 10 percent who can pull it off, my god, hug them. EL

[1]J. Bergan, *Behavioral Consultation* (Columbus, Ohio: Charles E. Merrill, 1977).

[2]Keith A. Acheson, and Meredith D. Gall, *Techniques in the Clinical Supervision of Teachers* (New York: Longman, Inc., 1980).

[3]See also David Champagne and R. Craig Hogan, *Consultant Supervision: Theory and Skill Development*, 1981, available from C. H. Publishing Company, 812 Irving St., Wheaton, IL 60187.

[4]Raymond E. Callahan, *Education and the Cult of Efficiency* (Chicago: University of Chicago Press, 1962).

Instructor Special Feature

TIME ON TASK

How much *quality* teaching time is there in your day? How much time do your students actually spend engaged in learning activities? Quite likely, a great deal less than you may think, if recent research is any indication. Educator and consultant Elizabeth F. Noon tells you how to increase time on task . . . and your productivity as a teacher.

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A teacher I know had a hard and fast rule: students could use the pencil sharpener only *before* school. This, she hoped, would save time during the school day. But it didn't work out that way; when the bell sounded, more than half of the kids were still in line at the pencil sharpener! That little operation had become a major event to them . . . and it killed a lot of time. But being conscious of time wasted, the teacher changed the rule. Children could go to the sharpener whenever they wanted—one at a time—so long as no one was speaking. The sharpening of pencils became incidental and natural. Problems ceased. And in the end, the teacher increased that valuable commodity known today as *time on task*.

While that may seem a rather remote case of time lost, more than likely it isn't. Have you ever calculated how much *quality* time—learning time—is dissipated in your class by students lining up for this or that, competing with themselves for attention, redoing work they already can do, sitting passively while a handful of others participate in a classroom situation, moving from room to room for special classes and the like, and waiting impatiently while you perform operations that they could do as easily themselves, thereby freeing you to use their time—and your own—more efficiently?

Consider this: If just five minutes an hour are lost, that's equal to a half hour or more each school day; or two and a half hours a week; or an entire day in just over two weeks. And that's figuring only five minutes an hour. Yet, in some studies children were found to be spending only about 25 percent of their school time in activities directly related to learning goals. Clearly, something is wrong here. And you pay the price for this wasted time because you're being deprived of time to do what you want to do—teach children. Children lose out, too, because they are missing all that valuable learning time.

How can we avoid such a loss? Let's look at three areas in which it may not seem as if time is being wasted, but in many cases a great deal of it is. These areas are school and classroom systems, responsibility sharing, and individual teaching style.

Analyze your school and classroom systems

First, think of yourself as a classroom manager and consider your systems of operation. Is more time devoted to tasks than is needed, at the price of important learning time? Certainly, there are tasks common to every school and classroom that are necessary and time consuming, but sometimes they assume undue importance. For starters, think about the distribution and collection of work materials and monies, dissemination of information, and room housekeeping chores. They all have to happen, but can they be simplified or de-emphasized? In some cases you may have unnecessary rules that can be phased out; in other cases, you may need better systems of operation that will result in new rules. Remember, too, that you aren't efficient if you are "doing for the children" what they can be doing for themselves.

Sometimes overall school programs are set up to provide efficiencies, but the net result is insufficient attention to individuals. In one school that had to have four lunch periods, the principal insisted that all children be lined up outside the door to the cafeteria well in advance. And when the door opened, it was another 10 minutes before the children at the end of the line were served. Teachers pointed out that one class lined up in advance was enough. The others could come along more gradually.

Primary teachers found they were spending up to eight hours a week on housekeeping

Bottlenecks, frustrations, irritations are inevitable with 25 children in a room and maybe 12 times that many in the school. But invariably, there are things we can do about them. One teacher moved her art class to the first period after lunch. Then she had a monthly committee of students that arranged all the materials on students' desks when they returned to the classroom. Time was saved.

In another school, primary teachers analyzed their time and found they were spending up to eight hours a week on housekeeping. They worked out models and kept refining them until they got it down to about an hour a week.

A principal who had a good corps of parent volunteers asked them to collect lunch and milk money, freeing teachers from that time-consuming task.

In the same school, teachers asked the principal for a better break with the PA system. They were being interrupted on an average of six times a day. Now it happens far less frequently.

A big problem teachers complain of is children being taken from the classroom for Title I, speech classes, and the like, with little consideration for their class schedules. One teacher decided enough was enough. She went to the principal and said that she was responsible for the children's progress, she could and would teach them to read. And she did! In other cases, where teachers and students have worked together to improve the carrying out of classroom tasks, they often doubled their time on task quotients. The result: more time for art and music, more time to read to children, more time to work with individual students, and higher productivity for everyone concerned. What's the point? As you clean up operations, eliminating nonproductive tasks and busywork, there is more time and incentive for children to be the dreamers, thinkers, and hypothesizers you want them to be. (And, remember, you undoubtedly have some instances in your school day where you are exceedingly efficient to begin with. Think of why, of what you did to score this success in your classroom management, and then use those techniques in other situations.)

Share responsibilities with children

A big difficulty in achieving better time on task lies in an inbred distrust of children. That's right! Teachers are often reluctant to hand over operations or even share them.

Today's kids feel pretty useless. The old days of household and school chores are gone and no one wants them back. But what must happen to replace them? Who needs Billy? Who is depending on him for what? If he isn't there will it make any difference?

Inherent to greater learning efficiency are opportunities for children to take hold of their lives and run them. They must consciously obligate themselves to accomplish prescribed tasks. The pattern has to start early and continue in ever growing complexity.

It's easy to see why teachers get off on the wrong foot. Children begin school with few of the skills needed to carry out the type of experiences they have in schools. Many times they are self-centered and only moderately equipped to fit into a group. So as far as school is concerned, we treat them as if they have just been born. They are protected and directed instead of being encouraged to be individuals ready to claim their birthrights of dependable fulfillment.

What is involved in giving them more responsibilities is *not* permissiveness but

the opposite of it. In *Kindergarten A* the children are lined up and taken to the toilets and water fountain. In *Kindergarten B* the teacher says from the first day that it is just like home. When one needs to leave the room he or she does. The first few weeks in *Kindergarten B* find a progression of children trying out the privilege, but the more interesting their activities become, the less they go, almost to the point the teacher needs to remind them once in awhile.

The *Kindergarten A* teacher also helps to dress her children for the playground on cold days, while the *Kindergarten B* children tug and pull with their boots. *Kindergarten A* teacher wears herself out providing duplicated sheets to color and patterns to trace. When her children go to the library, she has the *easy* or *picture* books put out so that no one will pick too difficult a book, and kids walk in line both to and from the classroom. Throughout the day, *Teacher A* makes decisions for students. By 3:30 she has put in a hard day, having been totally dedicated to her tasks. But, time on task was lost. And there were few chances for ego fulfillment by the children. In *Teacher B*'s case, however, time was saved and egos gratified.

Are you guilty of similar practices? When you consider strategies for a lesson, do you solicit alternative ways from the students, then let them select the one that works best for them? Most teachers and textbooks do not vest such responsibility in children. Either the curriculum, textbook, or teacher is to decide what is to be learned and how to go about it. Then it is up to the students to follow through. Maybe so, but it sure doesn't put much trust in the kids.

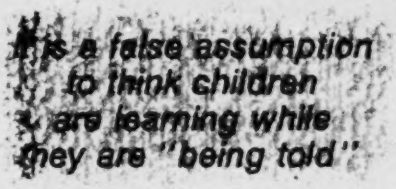
The biggest area most teachers reserve for themselves is evaluation. As a result, some children go through school not knowing what evaluation is all about. They tell you tests are to get marks or to go on report cards or to put in teachers' books. But testing in school should be to find out if something is mastered or requires more practice. It tells you and the children whether the strategies used were effective. It is the prime tool whereby you improve your efficiencies; for it says carry on, or stop and consider what needs to be changed.

Elementary children need many subtests, immediately marked by them to see if they are on target. And if they aren't, they turn to you, the expert, to find out whether they should change methods, study more, even to make sure they understand the basic process and what it is all about.

How much of the testing process are you ready to share with your students? Are you prepared to lay mastery or the lack of it squarely on their desks and expect them to do something about it? That's what trusting kids really means, and you won't have an efficient operation until this happens.

So we are talking about three points: insisting that children assume responsibility for their behavior; including them in selecting strategies to achieve mastery; and involving them in each evaluation operation that directly affects their achievement.

You won't make changes in these areas overnight, but you might think about instances where you can begin. For example, make a list of tasks and experiences that occur during the day. Note those that you reserve totally for yourself, those done largely by the children, and those



in which both occur. A sample list might include: arranging the room; keeping the room neat; maintaining standards of courtesy; settling personal differences; checking homework; collecting homework and other papers; controlling movement in the classroom; selecting learning objectives; selecting strategies to achieve objectives; carrying out strategies; carrying out evaluations; carrying out major evaluations; making media selections; deciding on need for additional work; deciding on ordering of tasks; and movement outside of the classroom.

Now, select two situations for change: one, a task or control which you totally reserve for yourself at present and another in which you and the children share responsibility but which you think they might possibly take over. In both cases, determine what the risks are in changing, what the advantages are to you, and what the advantages are to students. Your answers will determine your action. Do the advantages outweigh the risks? Are there really any risks at all? Act accordingly!

Critique your teaching style

Privately and to ourselves, we are professional enough to admit that some of our daily teaching techniques could be more efficient. The day is gone when it is sufficient for a classroom to be quiet and orderly, and no longer does each child get the same amount of time in skill areas: 15 minutes a day is enough for some children to spend on reading, but others need 30, 45, 60, and maybe 75 minutes, and we have to have management techniques that will accommodate that kind of variance.

So let's look at the heart of the matter, how to make daily teaching techniques more time efficient. Let's start with a list of what's *wrong* today.

1. Many teachers talk too much in their desire to orient, motivate, and explain. One reason might be that the objective of the lesson is too big or not clearly articulated. But regardless, it's a false assumption to think children are learning much while they are "being told."

2. Time is wasted and a lot of learning opportunities missed when an entire class is supposedly involved but only a few children are making responses. It would be far more economical to have four simultaneous groups with peer leaders.

3. Unevenness in rate of accomplishment has always been a problem, with some children completing a task while others are just getting started. Teachers cope with this situation in varying ways such as extra or bonus assignments, but the bonus task should *not* be on the same level as the task just completed. If the student can already do the task, why do more of the same to fill up the time?

4. Often a child is told to do something without really knowing why he is doing it, thereby diminishing his personal efficiency. Similarly, when he isn't involved in selecting the method of mastery, he may be employing a method that makes poor use of his attributes.

5. Not having enough evaluation breaks (times when the student stops and checks how he's doing) results in learning errors, especially if the student is on the wrong track. He also loses interest if the task continues without his knowing how he is doing.

6. Poor planning within a room or poor coordination among teachers often causes students to "sit and wait." Because they are children, we are careless (though unintentionally). They must wait for us with more grace than we wait for them.

Those six problems are often noted by time on task experts as they observe in classrooms. But they also note a number of positive actions being taken to make better use of time.

1. Teachers are increasingly rejecting the

continued

busywork type of workbooks and duplicating sheets.

2. They are setting up a goal and then selecting methods to meet it. This can't help but lead to better appraisals of what works effectively and what doesn't.
3. Teachers are applying variety to individualized instruction and learning.
4. Materials are more precise and relate more directly to their users.

Here's an example of how a teacher set up a time-efficient lesson. The main goal was mastery in single letter alphabetization; the time was 30 minutes.

To increase motivation, she prepared a sample worksheet with a list of class members typed down the middle. On the left, students were to alphabetize the first names, on the right the last.

Passing out materials, warmup, and directions took about five minutes. Children were advised that as soon as they were through, they were to pair up with others who had finished and the two would check their work together. (Such paired activity was one of the subgoals of the lesson.) The teacher was deliberately not providing answer sheets because she wanted students to look critically at each other's work. But there was a simple tally system at the bottom of the page, adding up the two columns and subtracting the misses with no translation into letter or percentage scores.

If five minutes an hour are lost each day, that's an entire day in just over two weeks

For those who would finish in advance of others, there were "game sheets" which they could play with their partners. These contained shorter lists of words requiring attention to the second and third letters. Not more of the same, but a step forward.

While most of the students proceeded on their own, the teacher worked with the five slower children at a table at the back of the room. For them, she added alphabet cards to which they could refer.

After about ten minutes, all five were at work on their own and the teacher was free to return to her desk. She said she would be glad to check game sheets with students as they were completed. Twice she got up and touched the shoulders of checkers to remind them to keep their voices down.

In about 20 minutes, the main activity was completed by all but those still at work at the back of the room. The teacher recorded the scores, noting names of students who had gone on to the more advanced work. Some asked about grade equivalents; she responded by asking what standard less than perfect would be acceptable. She asked for suggestions of places where alphabetizing occurs in which it would be confusing to have a word, name, term, town, and so on out of place. Practically every child was able to name a situation where it would make a big difference—dictionary, city or road list, encyclopedia, and so on. The message was clear. No room for error.

Any good teacher will say there was nothing spectacular or different about that lesson. Of course, there wasn't, but it was time effective. It had a goal, strategy, and evaluation. It placed responsibilities on children. It provided for individual differences. No one wasted time. It made a point. And it was fun.

Time on task in action

The following reports tell how teachers across the country are finding ways to increase time on task . . . and learning.

Individualization *can* be time efficient Laura Mader wanted time to spend with seven first graders who were deficient in reading skills. This is hard to achieve, especially early in the year when students lack independent facilities for moving ahead on projects of their own without teacher direction. But she devised a plan.

Ms. Mader had a large board with a pocket for each child, clearly lettered with his name, sturdily built and designed to last for the year. Few of the children could read proposed activities; so color coding and pictures suggesting projects had to be her allies at first. Examples: A book drawn on the card meant the child could select one and take it to his seat. Likewise for a puzzle or manipulative. A green card meant the teacher had looked over his workbook and he was to inspect it and see what she had marked. A yellow card entitled the child to go to the media center if he wished.

Once the children left for lunch, it took Ms. Mader about five minutes to put the cards in the pockets. But behind that was a lot of organization, because she wanted a good mix of activities that were meaningful and would keep interest high. Frequently she had to strike a balance between needed drill and creative activities. It was a varied and balanced diet.

continued

"42 percent of the day is spent in noninstructional activities"

Linda Shalaway

Recent research concerning time on task has pointed out not only the obvious—the more time students spend on a subject, the more they learn—but also the ominous—many teachers are not making the best use of time on task.

For example, a study at Michigan State University's Institute for Research on Teaching (IRT) revealed that some elementary classes receive the equivalent of five and one half weeks more instruction yearly than other classes—*during the same number of days!*

What causes this loss of valuable learning time? Drastic differences, according to the study, in time spent on noninstructional activities such as transitions between lessons, classroom interruptions, beginning and ending exercises, special assemblies, lunch, and recess. In fact, in several of the classrooms studied, as much as 42 percent of the school day was spent in just such noninstructional activities.

Research also shows that not only does the amount of instructional time vary among classrooms, but the time teachers allocate to individual subjects differs substantially as well. In the IRT study, for example, researchers found that the average *daily* time allocated to reading ranged from 24 minutes in one classroom to 84 minutes in another. Differences in time spent on other subjects were just as great.

Other researchers have also noted that time given to different topics within a subject likewise varies among classes. Researchers conducting a Beginning Teacher Evaluation Study (BTES) at the Far West Laboratory for Educational Research and Development found that math instruction on the use of money ranged from an average of nine minutes per year in one second grade classroom to 315 minutes in another. These differences, the studies stress, obviously indicate that some students have more opportunity than others to learn certain subjects and skills.

Now when *engaged* time is considered—that portion of the allocated time during which a child is actually working or paying attention—the differences in opportunity to learn are reported to be even greater. BTES researchers Charles Fisher, David Berliner, and colleagues found that in math instruction, student engagement ranged from 50 percent to 90 percent among the classes they studied. But they further estimate that in some classes students are engaged as little as 35 percent of the time. In a 30-minute lesson, that amounts to slightly more than 10 minutes of actual learning time.

The situation described by research boils down to one simple fact: Time is opportunity to learn, and some students have more opportunity than others. What can be done about it? Plenty. And here's what recent research suggests.

First, find ways to increase instructional time itself

1. Control outside interruptions and recover wasted minutes. A short discussion with your principal, for example, can help control time wasters like frequent intercom announcements, surprise visitors, and *unnecessary* assemblies.

2. Reduce transitions between lessons and activities. Transitions are those moments lost when students are getting out books, sharpening pencils, putting away materials from previous activities, and otherwise "getting ready." In some rooms, transition time has been recorded by researchers at over 70 minutes per day. Established routines can help keep transitions brief. If children know what to expect and what comes next, they can move quickly from one activity to another. Also, make sure students have the necessary materials at the proper time.

Next, find ways to increase the amount of instruction within your instructional time

1. Better pacing of lessons is one way, according to research reports. The faster the pace, the more content covered and the more students achieve. Certainly, there is a limit to how fast you can go. But research clearly shows that many teachers underestimate the pace students can follow and the amount of content that can be covered.

2. Integrating or combining subjects into multipurpose lessons is another suggestion. For example, have students *write a science* report, or *read* an account of an *historical* event.

3. Be businesslike and work-oriented. Many researchers, including Berliner, have noted that a teacher's attitude is a critical factor in this issue, and those who are businesslike and work-oriented seem to be the most successful in getting their students to pay attention and learn. He suggests that this does not mean you should not be warm and caring; you can be both serious and enthusiastic while still communicating the belief that academic learning is important.

4. Abundant research also points to the effectiveness of "direct instruction." Organized and structured lessons, formal presentations of the material to be learned, and teacher leadership and supervision help decrease the number of errors students make on academic tasks. And fewer errors mean greater success at a task, which also increases attentiveness.

5. Studies reveal that even the form of an activity or instruction affects the time students spend on a task. BTES researchers report that students who spent more time in a group setting had higher rates of engagement. But rates were low when students spent two-thirds or more of their time in seatwork and had little interaction with an instructor.

6. Monitoring and supervision of work, researchers found, are also necessary to keep students on task. In the rooms of effective teachers, they noted little free time or unsupervised activity. Careful monitoring, they added, is perhaps easiest in a group setting, which doesn't mean instruction can't be individualized or that children can't work on their own. It just means that teachers must be faster on their feet, even though much physical energy is required of those who monitor well in rooms where students work individually.

Time, as various studies conclude, is the one resource in short supply in every school, rich or poor. It's also the resource with the greatest effect on student learning. Effective use of time on task is a skill, and not an easy one to master. Like other important skills, it takes time. But considering the gains, it's time well spent. □

Linda Shalaway is a contributing editor of INSTRUCTOR

About 45 minutes a week were required to lay out her master sheet showing what cards would go in what pockets during the week, but the discipline was worth it.

By February, the card pockets had more extensive use. There were cards for ongoing projects of two or three days as well as the daily ones. A student could divide his time between the two, giving the teacher even more flexibility in helping slower children to have additional practice.

In evaluating this plan, Ms. Mader points out that each child is working independently and feels an individual responsibility to complete his task. She considers it a big improvement over handing out duplicated worksheets which some do fast, some slow, and some never complete.

Sometimes minor modifications can be major time-savers Three fourth grade teachers assigned math homework four nights a week. *Teacher A* began math class by collecting the homework. The process took about five minutes and often got the class off on a sour note, since children without homework were scolded or given a penalty.

Teacher B had weekly charts with the students' names in alphabetical order and four places to check off. When a student entered the room, he dropped his homework into the box and put a check beside his name in the appropriate column. The teacher could quickly look down the sheet and see whose work was missing.

Teacher C appointed two pairs of markers each week. When a student arrived, he took his paper to a marker, who used a felt-tip pen to credit him with the number correctly done. Then he went to a chart and entered that number. Every student in class had the chance to be a marker, a much sought-after job.

Teachers A, B, and *C* all got to see the papers. *Teachers B* and *C* got their math classes off to a better start and picked up valuable minutes each day. *Teacher C* also eliminated the need to mark the papers and vested responsibility in students.

In some cases, time on task may require using *more* time than you might expect to use A fifth grade social studies curriculum called for children to have a working use of words denoting land or water forms such as strait, island, peninsula, and the like.

Two teachers created somewhat similar models, differing only in the responsibility put on the students. In *Model A* the student had to create and write the definition for each term, while in *Model B*,

continued

the definitions were given in different order in a second column and the student needed only to draw a line to the correct response. Thereafter, the models were identical in requiring students to make a diagram illustrating each definition, and then to find a location on the globe that illustrated it.

In *Model A*, creating the definitions proved hard, even using the dictionary, though by the time they had them done, students could usually spell the words, too. Three students used three days, 16 used four, 7 ran over into the fifth day. In *Model B*, 17 students finished in two days, and all others in three days.

Both classes took an identical test based mostly on identification. There was no appreciable difference in the marks, with *Model A* doing just slightly better than *Model B*. But four weeks later, they were tested again. This time *Model A* scores were almost double those of *Model B*. The teachers checked again near the end of the year with similar results. They decided that the more intensive *Model A* was essential for mastery.

When everyone participates, instruction requires less time Teaching students to reason and argue effectively is a middle grade social studies objective that usually takes a lot of time. When Ms. Randall analyzed time spent on this activity, she recognized that many children in her class didn't even participate except as listeners or observers. To provoke discussion, she often did a great deal of the talking. Also, she was usually the sole arbitrator in the arguments.

To improve this situation, she announced a topic one day in advance and reminded students about it in brief mentions. Then she started the class by announcing groups of three, explaining that each was going to carry on a debate with an affirmative speaker, a negative speaker, and a judge.

For about five minutes, the teacher solicited pro and con arguments, and as usual, most responses came from a small group of students. This was the pump-priming part of the activity.

Then for a few minutes, each debater had the chance to organize his attack while the teacher was meeting with the judges to discuss how they would record points of argument and rebuttal so as to choose winners.

Eight debates occurred simultaneously, with the teacher working the egg timer, which had a loud bell, and listening in here and there. Each speaker had two minutes, the judge talked for two minutes more, followed by one minute rebuttals in the reverse order. Points were tallied, winners declared. Five affirmatives, three negatives. Every student in the class had been a participator.

Too much preparation on your part not only takes time; it deprives children of valuable learning experiences Every week, Mr. Mitchell spent a good hour to an hour and a half preparing a worksheet that would accompany the weekly spelling list. To acquaint children with the words, he wrote sentences and they had to supply correct spelling words. Sometimes he gave definitions and they had to put in the appropriate word.

But when he stopped to think about it, he was doing most of the work . . . and eating up time. He was making up the sentences and definitions; the students only had to put in the words. Also, the sheets might be good language exercises,

but they seemed to have little effect on weekly spelling scores.

Then Mr. Mitchell set out to more nearly meet the needs of each student. New worksheets provided space and devices for students to make their own analysis of words. They listed those they thought they were sure of and those that looked hard. They set individual goals for how many they would master.

Some exercises pointed out idiosyncracies in the words, places where they were not phonetic, or other variances. There were clues for studying. When the teacher wanted sentences, he might say. "Pick the hardest half of the words you are learning and write sentences using them on the back of the sheet." He might also use a light touch. "There will be a small prize for the student using the most words on the list in a single sentence that makes reasonable sense."

Mr. Mitchell had learned some important lessons. When he made his original sheets, it was a group activity. When children wrote their own sentences it was an individualized activity. When a student committed himself to learning so many words, he had taken the first step toward mastery. When he became involved in identifying the foibles of the words, how they are syllabified, and their tricky spelling, he was further along the way.

Time can be saved by allowing two objectives to be met at one time It was customary in Ms. Fox's kindergarten for her to sound a bell at 9:30 A.M. This was a signal for kids to put away what they were doing and form a circle on the floor. A variety of activities then took place; kinesthetic, musical, reportorial, counting, and the like, followed by the morning story which she read or told.

It seemed to take the children longer and longer to put away their things, often using as much as 15 minutes of what Ms. Fox thought was the most valuable part of the day, thereby crowding out the story entirely. This defeated her purpose of interesting them in books as well as providing a quiet time before they went outside to play.

A goal of the kindergarten was to teach organizational skills and Ms. Fox decided to attend to it as well as her other problem with a single management decision. Each week, two children were appointed to put away the playthings, and in introducing the plan, Ms. Fox and the class discussed what would be involved. As soon as they heard the bell, all but the two would come immediately to the group. The weekly "putter-awayers" would ever so quietly pick up the toys and stow them away.

The new system worked amazingly well. To her great surprise, the two did the picking up in just about the same time that the whole class was using before. Then they would quietly join the group. When the hour was over, Ms. Fox would go with the two to inspect how they had done their jobs. She could confirm how quietly they had performed, or subtly suggest that they be a bit more careful about noise. When a child introduced a new system or arrangement, she would see it and comment on his judgment or creative idea. In almost every instance, she noted an improvement in how they put things away from Monday to Friday. Clearly, they grew in their jobs . . . and she had the full time to work with the group.

And that's what time on task is all about; increasing the amount of quality teaching time during your limited day, increasing the time your students spend learning rather than moving about or simply waiting, taking full advantage of the time you have at your disposal . . . to the benefit of your students, and yourself.□

Elizabeth F. Noon is a writer and education consultant and Editor Emeritus of INSTRUCTOR.

THE FRIDAY PLAN

by Richard B. Johns

Illustration by Michelle Segue

Teachers frequently complain about the number of events that constantly interrupt instruction in their schools. Assemblies, field trips, student council meetings, and other activities seem regularly to remove one or more students from every classroom. As a result, classroom teachers must often revise, postpone, or repeat lessons.

One school, however, has come up with a plan to eliminate daily interruptions. The plan, known as the Friday Plan, was initiated this year at the Modern (Missouri) Middle School.

Larry Lightyear, assistant superintendent in charge of innovation, explained the plan: "We have taken all the typical events that interrupt instruction — assemblies, club meetings, and the rest — and scheduled them for Fridays. Under the Friday Plan, teachers carry out regular instruction on Mondays through Thursdays. Fridays are reserved for all the other activities that would normally interrupt instruction. Since no instruction occurs on Fridays and there are no interruptions on the other days, no lesson plans ever have to be altered in any way."

To illustrate how the plan operates, Lightyear provided the following schedule for a typical Friday at Modern Middle School:

8:10 - 8:35: Prayer and Meditation

A new Missouri Senate bill will allow five minutes of prayer per day. Under the Friday Plan, that translates to 25 minutes every Friday. Anticipating full legislative approval, the innovative staff at Modern intends to be the first in the state to implement a prayer program. Participation will be voluntary, and a priest will be on duty to hear confessions.

8:35 - 8:45: Swish and Spit

After cleaning their minds through prayer, students clean their mouths with fluoride. A companion program, Wipe and Flush, has been discontinued.

8:45 - 9:30: Advisor/Advisee Program

During this time, teachers meet with small groups of students to "rap." Students and faculty are able to rid themselves of much hostility during these sessions by sharing their real thoughts about one another.

9:30 - 10:30: Assembly of the Week

Last week the Moral Minstrels, a gospel group from Joplin, shared their music with the students and also talked about their past experiences as gang members and drug addicts.

10:30 - 11:00: Collection of Money

Because of budgetary problems in the district, Modern has instituted the "Fund-Raising Project of the Week." Recently, students collected unread newspapers on their way to school and sold them to passing motorists. The school office also collects various debts from the students (such as lunch charges and library fines) at this time. Representatives of a local finance company are available for consultation.

11:00 - 11:30: Lost and Found

Students who have misplaced items during the week are allowed this 30-minute interval to search the building. Finders-keepers rules are strictly observed.

11:30 - 12:00: Study Period

During this time, students may turn in all the assignments that they left in their lockers on Monday through Thursday. If homework is still unfinished, students use the time to dream up creative excuses before visiting their respective teachers.

12:00 - 12:30: Lunch

Leftovers are served every Friday so that the cooks, like the teachers, have only four preparations per week.

12:30 - 1:30: Film of the Week

The most popular film from the Monday-through-Thursday classes — chosen by student vote — is shown backward and with stop-action to the entire student body.

1:30 - 2:30: Club Program

Various groups meet with teachers or community volunteers to learn about

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RICHARD B. JOHNS teaches seventh-grade social studies in Marshall, Mo. The Marshall schools do not currently use the Friday Plan. *© 1982, Richard B. Johns.*

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The Friday Plan
(Continued from back cover)

favorite hobbies or special interests. Some current offerings include "Strategy and Tactics in Electronic Football," "Creative Desk Graffiti," "Our Drug Laws," "How to Watch TV," and "Your Rights in Juvenile Court."

2:30 - 3:00: Pep Assembly

Recently, the girl's field hockey team was honored with an assembly as they prepared for their first intrasquad game of the year.

According to Lightyear, the Friday Plan is working quite well at Modern Middle School. Although teachers must still plan lessons four days per week, no plans are needed on Fridays, and no plans ever have to be changed. One veteran staff member commented, "Nobody ever did anything on Fridays anyway. Why not blow the whole day?"

The students at Modern appear to be learning just as much as in the past, because there are no interruptions to instruction. In addition, attendance has improved on Fridays. One student stated: "Friday is a lot more fun now than it used to be. We call it Fun Day."

The Friday Plan can be adapted to fit the needs of almost any school that has an interruption problem, according to Lightyear. He warned, however, that the plan could fail if the interruption level has not yet reached a sufficient level. To determine the interruption level of a given school, Lightyear suggested that staff members keep interruption logs for several weeks, recording the number and length of all interruptions to basic instruction. If the interruptions average four to five hours per week, Lightyear believes that the Friday Plan will successfully solve the problem. □

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Looking Behind the Teacher's Back

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During a math class in Westwood Elementary School, Paul S., an 11-year-old sixth grader, was observed to pinch the boys sitting next to him, throw spit wads across the room, and make punching motions at the posterior of the teacher who leaned over in front of him. Paul was not reprimanded; in fact, his behaviors went unnoticed. At the end of the school year Paul was selected by his teachers to win a coveted "Good Citizenship Award." How was it possible for a child to exhibit such overt disruptive behavior in near proximity to teachers and yet win an award reserved for children whom teachers considered to be cooperative, well behaved, and generally nondisruptive? The answer lies in the fact that the teachers did not observe Paul's disruptive behavior. To reprimand disruptive behavior, a teacher must first see the behavior exhibited.

However, given the complexity of classroom settings, teachers are able to give selective attention to some, but not all, of the activities in the classroom. When a disruption occurs, the teacher may look for a student whom he or she expects to be causing the disruption. One outcome of such selective attention is explained by Good: "Since the teacher looks (because of the expectation) for a particular student to be a behavior problem, the student is likely to be criticized when the situation is ambiguous" (1980, p. 82). Good states that when several disruptions occur simultaneously, a student may escape the teacher's detection because the teacher might not look in the student's direction, particularly if the teacher did not expect that child to be disruptive.

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This paper is concerned with teacher expectations, but also examines the ways that students help to create and/or maintain the expectations teachers have for them. Students develop expectations for their teachers; they learn the extent and limitations of teachers' selective attention; and they act in ways that support the teachers' expectations for their behaviors.

The research reported here shows that some children become quite adept at timing their disruptive behaviors to occur behind the teacher's back. The example of Paul demonstrates that some children can and do anticipate the actions of their teachers (form expectations), manipulate their own actions to occur at particular times and for particular audiences, and, most of all, that they play an active role in determining what occurs in classrooms.

Other children choose to behave in ways they know will be acceptable to the teacher. They support the teacher's expectation that they are not disruptive. These children are rewarded by eliciting a positive response from teachers and a self-fulfilling prophecy occurs through the reciprocal reinforcement of teacher and student perceptions and expectations for one another's behavior.

Other children have not learned what behavior teachers expect of them, nor have they learned that disruption can occur as long as the teacher does not see that disruption. These children complain that "Johnny gets by with murder, why do I always get in trouble?" Such children are "in trouble" more because they get caught more often. They get caught more often because they cannot perceive how and when they can be disruptive without being seen, or when they should not misbehave at all. By disrupting when the teachers are looking at them, these children support the expectations teachers have for them as disruptive children.

The research reported here is based on observations of children both in interaction with teachers and independent of that interaction. While most studies in classrooms have focused on teacher-pupil interaction, few have looked at children's behaviors independent of interaction with teachers. A notable exception is found in the recent work of Carew and Lightfoot (1979), who observed children in nonteacher-structured school activities to determine how the children's behaviors influenced the teachers' perceptions and treatment of the children and to study the effects of the teachers' behaviors on the childrens' academic performances. Carew and Lightfoot have suggested that child-focused observations can "tell us much about the teacher's understanding of children, of how they develop and how their development can be influenced, or how they differ and what aspect of diversity the teacher values" (1979, p. 71).

Most studies have defined children's development in terms of their intellectual or academic growth. Children's classroom behaviors, however, include a wide range of academic and nonacademic activities which occur either simultaneously with, or separately from, one another. Taking all behaviors into account gives a better picture of the social world of the classroom.

Study design

Pupils and classrooms

Paul and his sixty-two fourth-, fifth- and sixth-grade classmates were observed as a part of a year-long field study in Westwood Elementary School (Spencer-Hall 1976). In a unit of the school there were four teachers and several student teachers who taught as a team, and all the teachers had contact with all the children. The learning program was individualized, and in most classes children were working at different levels. There were two features of the unit which are important to note because of their influence on classroom interaction.

First, the classrooms were more open than traditional classrooms are, but less open than classrooms where children are

allowed to move about frequently. Although students were required to stay in their seats most of the time, the proxemic (spatial) arrangement of desks, tables, and chairs varied on a day-to-day basis. This arrangement made it impossible for Kounin's "withitness" to occur. According to Kounin (1970), when students are arranged in typical traditional rows, teachers are able to detect disruptive behaviors even when their backs are turned, because they know who is sitting in the area from which the noise or movement came. Withitness would also occur in traditional classrooms, because there is a front and back of the room, with teachers taking the spotlight in the front. In the observed unit, teachers could turn in any direction and have students behind them, yet the teachers would not know who was behind them at any particular time.

Second, these children all came from similar socioeconomic backgrounds and were white. Most were the children of professionals, primarily professors; none were from working-class backgrounds. They were also high-achieving children who scored well on standardized tests. The students' socioeconomic status influenced the ways they interacted with their teachers, because the children possessed good verbal skills.

Data collection

Instances of disruptive behaviors were recorded over a school year in the form of field notes. From the field notes, several typologies were developed for recording the kinds of disruptions exhibited by children, the responses of teachers to these disruptions, and the responses of the children to teachers' acknowledgements of their disruptions. All the teachers and a sample of children were interviewed on a formal and on an informal basis. Each teacher was asked to list the three most cooperative and three least cooperative children in the unit. Cooperative children were defined for the teachers as children who tried to do what was expected of them. In interviews teachers defined cooperative children as ideal children; they did not disrupt the class, did their work, and did not bother the teacher with unnecessary questions.

> INTERVIEWER: How would you describe an ideal child?
>
> TEACHER: Well, the way he does his work and keeps quiet. I guess a model child would not disrupt class, just respect other people's rights and understand the rules and try to abide by them.
>
> INTERVIEWER: Why did you choose Jeannie as a cooperative child?
>
> TEACHER: She could work well on her own, without requiring a lot of teacher supervision.
>
> INTERVIEWER: Is that the same reason you chose the other children as most cooperative?
>
> TEACHER: Right. If I couldn't get to them and they did have a question, they wouldn't disrupt the classroom. They would go on to something else, or they would wait patiently.

Teachers viewed uncooperative children as argumentative and negative. Two teachers expressed their definition of uncooperative children in the following way.

> TEACHER A: They never want to do what you tell them to do—they argue with everything.
>
> TEACHER B: They always think the teacher is wrong.

Four case studies are presented to show the typical kinds of disruptive patterns found among the children in the elementary-school unit. Each child (Hank, Charlie, Sally, and Paul) represents a composite style which some children used in dealing with teachers.

The discussion is centered on concepts developed by sociologist Erving Goffman (1959). Goffman's approach to understanding human behavior has been called dramaturgical because of its analogy of life to the theatre. Goffman claims that persons' abilities to influence others (to their own benefit) are a matter of their impression management. Persons who have good

presentations of self (say the right things, dress appropriately, etc.) can be said to be successful in managing the impressions others have of them. Goffman explains that interaction occurs either in a frontstage area (or arena) or a backstage area. Frontstage areas are in public places where one is trying to impress others or keep up a front. Backstage areas are those where one can let down, relax, and prepare for the next frontstage encounter. In presenting the case studies of Hank, Charlie, Sally, and Paul, their different styles of impression management are compared. In the classroom context, the frontstage area is the proxemic situation where a teacher can see a child, while backstage refers to areas where she cannot see a child (backstage for a child is behind the teacher's back or outside her view). As an observer, I could note activities in both areas.

Case studies

Hank. Hank was a sixth grader who rarely disrupted either in the front- or backstage areas. In fact, he worked hard at winning the teacher's approval. Hank exhibited good impression management and consequently was considered by the teachers to be among the most cooperative of all the children in the unit. He represents those children who teachers described as "ideal," that is, they did not cause problems, were pleasant, and in general did what they were expected to do accurately and quietly.

Being an ideal student was a conscious effort on the part of children like Hank, who accepted a subordinate position to teachers as the only choice. Hank was also protective of student teachers. I asked him if he thought it was important to follow the rules of student teachers.

> HANK: Yeah, because . . . if they can keep the kids under control, then they get good grades and they can become teachers. It's sort of like you had to help them.

Hank, and the others like him, worked very hard all year to be good citizens in hopes of winning the Good Citizenship Award (won by Paul). Being good meant not causing trouble and sometimes seeing that others followed the rules.

> INTERVIEWER: What advice would you give a new person coming into Westwood School?
>
> HANK: Well, try to behave in the classroom. Like if I've caught some of the kids running down the halls or fighting, you know, I just try to stop them and everything because, you know, you just try to make this look like a good school, because I found those two kids fighting on second floor, and I broke it up and held them away until a teacher came. . . . There's this award called "Good Citizen's Award" for sixth-grade boys and girls. And one of the boys which the teacher thinks stands out best, they have a vote on it. And whoever gets the most votes wins. So it's academic and it's how you get along with your parents.

Being good all the time, while a case of teachers and children meeting one anothers' expectations, had the hidden consequence of the good children getting less attention from the teacher. Selective attention was paid to the most salient children, that is, those who were noisiest, or most disruptive, or expressed the least understanding of lessons. Children like Hank tended to be quiet and self-sufficient and, therefore, when they did raise their hands with a question, they were not always acknowledged by the teacher. Rather than call out or walk over to the teacher, they waited for long periods of time at their seats or gave up altogether.

Charlie. Charlie was a fifth grader who, in complete contrast to Hank, constantly disrupted in both front- and backstage areas. Because he disrupted frequently when the teacher was looking, he was also frequently reprimanded and was considered the least cooperative student by most of the teachers. His constant disruption in the backstage area was also seen negatively

by the other children; therefore, he became a social isolate.

Charlie constantly hopped out of his chair, punched other children, danced, tapped out tunes on his desk with his pencil, and propped his feed on the desk—regardless of whether he was in the front- or backstage area of the classroom. I once observed Charlie in a music class in which he spent his time loudly talking or crawling around on the floor. While the class sang "I'm a Yankee Doodle Dandy," Charlie made little yells during all the upbeats and rests. Although the teacher's back was partially turned to the class because she was playing the piano, Charlie's disruptions were so frequent and loud that they drew her attention to him. Over time, children like Charlie received more attention from the teachers than most of the other children, that is, the salience of their disruptive behavior necessitated selective attention to them over children like Hank.

Sally. Sally was a 10-year-old fifth grader who actively sought the teachers' attention by disrupting in the frontstage area, but stayed on task and rarely disrupted in the backstage area. Her disruptions, however, were quite different from Charlie's. Children like Sally disrupted the classroom by challenging the teachers rather than by causing noise, moving aimlessly around the room, or throwing paper wads. In fact, they were serious about their work and were self-motivated in a way similar to Hank.

Sally challenged the teachers by requiring them to explain their actions and behaviors. For example, children like Sally would walk into a room where the chairs had been placed in a new arrangement and would complain repeatedly, "Why do we have to sit like this?" Or at other times they would argue that the work was "stupid" or "dumb." Thus, on the rare occasions when they were not on task or were caught talking to a friend, they shifted the reprimand to the teacher, for example, "If this work wasn't so boring we wouldn't be wasting our time." Sometimes the response was more defiant; children would shout at a teacher such things as, "Ms. Bradley, you don't run the program!"

The teachers could control these children to the same extent they were able (or unable) to control their classes as a whole. For teachers who had little control, these children were the source of frustration and embarrassment. In the following situation a math teacher, Ms. Waddell, was trying to have a conversation with me after her math class. We were interrupted by a girl's questions.

> The last girl to leave the room looks at Ms. Waddell and asks, "How come your hair is two colors?" (It looks as though some streaks of blonde are growing from a time in the past when Ms. Waddell had dyed her hair.)
>
> Ms. Waddell's face becomes quite red due to her embarrassment. I pretend to concentrate on my notes. She tries to get the girl out of the room by saying, "Oh, it's just the way my hair grows."
>
> But to no avail. The girl says, "It looks like stripes. It's light down here and dark up there."
>
> Ms. Waddell does not answer, and the girl takes the hint and finally leaves.

Challenges were not always embarrassing nor defiant; some were more subtle, yet successful, attempts to throw the teacher off balance. The common feature to both types of challenges was the child's assumption that the teachers could be manipulated. In an informal interview outside school a girl described how she "got her own way" with teachers and could leave the classroom periodically by crying. She then demonstrated her ability to conjure tears which were, indeed, very convincing. In her words, "It works every time."

The underlying perception of these children was that they were victims of unfair adult discrimination. They expressed to me in interviews, and in informal discussions outside school, that teachers gave

them no rights as people—that teachers had all the power and kids had no power. The following comments from my interview with Sally exemplify the perspective of these children.

> SALLY: Well, I mean . . . the teachers really don't respect the kids that much really. If they really want some respect, they gotta, you know, show some. I mean you don't ever . . . the teachers can tell you to shut up when you're getting loud, but the kids can't tell them to shut up.
>
> INTERVIEWER: Why do you think that teachers don't respect kids that much?
>
> SALLY: Cause they don't show respect at all. They don't ever ask a kid whether or not, they just say "Do this!" And like they can tell you what to do, they're authority. I mean it's like a cop can go around with his siren on, running red lights and killing people. Well, the teacher can do most anything in the school, cause of what they have, their authority of being a teacher.
>
> INTERVIEWER: Do you think there are some teachers who hate some kids?
>
> SALLY: Uh huh. Like one of my friends went down, she was having some trouble with the teacher, she went down to the counselor to talk about it, and the counselor went and told the teacher, and now the teacher hates her.

These children were quite irritating to the teachers, who preferred children like Hank who did not question their actions. Because the children did not willingly comply with the rules, the teachers considered them uncooperative. These children, however, preferred an uncooperative image, and it was something they worked for. To be uncooperative meant you did not give in to the teachers. Thus Sally and the others like her saw themselves as the defenders of the rights of children.

Paul. Paul's behavior, as described in the beginning paragraph, was unique because of his ability to exhibit disruptive behavior only when the teacher's back was turned or in the backstage area. Like Hank, Paul was aware of what it meant to be good and knew how students should behave so that teachers would think of them as good, as was clear in Paul's comments during an interview.

> INTERVIEWER: If you could give some advice to a new person coming into Westwood School, how would you tell them they should act?
>
> PAUL: I'd tell them to act pretty good until they got to know the teachers. There are some teachers who are nice and who act sort of casual, and so you get to know that way, and then there are other teachers that just rather you sit down and get your work done as fast as you can. So I'd just tell them to be good until they get to know their teachers and see how all the other people act and everything, and who gets in trouble for what they are doing.

This type of pupil often made a rapid shift from presenting a "good" nondisruptive front to the teacher to disrupting when her back was turned. Paul, for example, looked down at his paper and either worked part of the math problem, or moved his pencil as if working the problem, when the teacher was looking. However, he would quickly shift to punch a neighbor when she turned her back. This shifting back and forth obviously seriously reduced the time spent on task, but his timing of disruptive behaviors allowed him to do just enough work to stay on level.

These children were occasionally caught, that is, the disruptive behavior became so absorbing that they forgot to continue looking for the teacher's movements. If caught, they were likely to sheepishly grin, giggle, or show embarrassment to indicate their slipup. The teachers so rarely caught them that they continued to see them as cooperative, but subject to an occasional lapse into understandable childish behavior ("Children will be children").

One of the additional benefits of disrupting in the backstage area was the positive attention and support given by peers. Getting by with negatively sanctioned behaviors or breaking the rules was admired in children like Paul and was also great fun

for them. If only for a brief moment, punching at a teacher's rear was a daring act and had a cathartic effect on the children. Paul, for example, was one of the most popular children in the unit.

Disrupting behind the teacher's back varied according to the teacher and depended on the amount of control a teacher had of the class. In situations when control was weak, the noise level raised to the point where children could call some teachers "butts" and "assholes" and say other profanities in loud tones. The noise provided a cover so that the teacher did not hear the profanities, but the children could take pleasure in having said them loudly. The following episode took place when a teacher, Ms. Bradley, was having a discussion in one part of the room with one child while children were moving about and shouting in another location.

> Andy, Ralph, and Paul arrange and rearrange their chairs. Jennifer continues to argue with Ms. Bradley. Anne and Rose are sitting by themselves on the stage area. Anne shouts, "That's not fair, Bradley-butt."
>
> Rose says, "Wow, what an asshole." Anne says something about her being an SOB. (Anne won the Good Citizenship Award for the girls.)

When teachers had strong control of the class, behind-the-back behavior took a more subtle form. For example, there was a rule that only one person could go to the restroom at a time. To leave, children had to write their names on the board and erase them when they returned. Some children who were in two different classrooms worked out a system for breaking the rule. They would simultaneously sign out at a given time and meet in the restroom where they could talk and socialize. Children in the same classroom occasionally broke this rule by waiting until a friend who had signed out left; then they left themselves without signing out. By waiting until the friend had returned, the child would usually slip in later unnoticed—or, if caught, could merely say he or she had forgotten to sign out. Because they were seen as good, nondisruptive children they were excused.

Conclusions

Observations over a long period of time in Westwood School showed that children were capable of utilizing complex and sometimes subtle or calculated ways of dealing with teachers. Their behaviors reflected differing abilities at impression management. While the strategies in and of themselves were interesting, comparisons between the children's behaviors in front- and backstage areas were also of note. For example, Paul and Charlie had similar rates of disruption. Paul was seldom reprimanded and Charlie was frequently reprimanded. This happened because the teachers saw few of Paul's disruptions, while they saw most of Charlie's. Charlie's disruptions were done overtly and noisily in the frontstage area. Paul's disruptions were done more subtly and quietly in the backstage area. Charlie would hit someone and say aloud, "Pow!" while Paul would hit them without saying a word when the teacher's back was turned. Both were aggressive acts, but Charlie's was done verbally and Paul's was done nonverbally.

Because children vary in the ways in which they misbehave, children's classroom behaviors cannot be labeled as either disruptive or nondisruptive, cooperative or uncooperative; children are not inherently one or the other. Teachers' perceptions of children, however, tend to become categorized into those who cause problems and those who do not. For the outside observer, as well as children who could observe Paul's total range of behaviors, Paul was no less disruptive than Charlie, just better at timing disruptions, perceiving the proxemic differences in the front- and backstage areas, and quieter in performing disruptions.

In comparing the behavior of Paul and

Hank, Paul was quite disruptive and Hank was seldom disruptive, yet Paul was considered more cooperative and a "good citizen" by the teachers. Because the teachers saw neither pupil as disruptive, they based their preference for Paul over Hank on other factors. One reason for their preference for Paul may have been that he smiled more when they looked at him. He used smiling as a way of appearing innocent in the frontstage after disrupting in the backstage. He could punch someone one second when the teacher was not looking and smile pleasantly the next second when she was looking.

Paul and Sally were more similar in their disruptive behaviors, but different in that Paul's occurred quietly in the backstage and Sally's occurred overtly in the frontstage. Sally was seen as uncooperative, disrespectful, and a general "pain in the neck."

Compared to fifth and sixth graders, fourth graders were generally less adept at impression management. They knew what behaviors were acceptable or unacceptable to teachers, but had not learned to time their disruptions either behind the teacher's back or under the cover of classroom noise. However, even in the fourth grade, students learned that there were ways to gain control of a situation by throwing the teacher off guard. In the following example a group of fourth-graders had engaged in a conversation which was disruptive but which they found quite enjoyable. The example is interesting because it shows that there are some classroom disruptions which are beyond the teacher's normal range of responses. They are situations about which no one warns teachers in teacher education classes.

> "James is playing with his dick."
>
> Another boy chimes in, "He doesn't have one, he's a girl." Then he says he has to "go," he keeps holding himself and another says he remembers a time when he had to go, and the discussion continues on and on. "Here's your dick, tickle it," and so on.
>
> Mrs. Rawls can hear the conversation but ignores it. Her first acknowledgment, however, is to ask the boys if they heard the rules for management yesterday.
>
> Robbie ignores her and says, "He's hitting me where it counts," which is actually what Robbie has been doing to someone else. Ms. Rawls ignores his comment.
>
> Ms. Rawls changes the subject by attending to another matter and announces, "Remember what we said the rule for the fan was—an arm's length away."
>
> James and Robbie are still poking each other "where it counts" and giggling and complaining at the same time. Ms. Rawls ends the disruption by having the children put up their current work and begin something else.

Other teachers dealt with similar situations in the same way—they redirected their responses to focus on another behavior, as this example shows.

> Curtis threw an eraser and hit Bert in the head. Bert said, "Hey, you turd!"
>
> The teacher looked up and said, "Bert, keep your hands to yourself."

Asking teachers to choose their most or least cooperative children is interesting in terms of comparisons to actual behaviors and demonstates that the labels do not always correlate with observations of classroom situations. As is clear in these case-study examples, children could be regarded as uncooperative or cooperative, or disruptive or nondisruptive, depending on one's vantage point. It is important, therefore, that all perspectives, children's as well as teachers', be taken into account in doing classroom observations. Some instruments which measure teacher-pupil interaction patterns and their frequency would not describe the subtlety of children's behaviors because of their focus on academic exchanges between teachers and children in the frontstage area. Much classroom activity takes place which is not academic but it is nevertheless important social interaction that affects academic interactions.

The observer must also look proxemically at all areas of the classroom in relation to each other. To look solely at the teacher's behaviors, at children's behaviors, or at interaction sequences between teachers and children gives only a partial picture of the classroom world—it ignores the range of behaviors that happen behind the teacher's back. What do other students do when the teacher is interacting with one student? The fact that behind-the-back behaviors occur frequently shows that children are capable of more thoughtful, clever, and perceptive plans of action than is sometimes assumed, and that various children may experience the classroom in ways very different from each other and in ways different from teachers.

In a study conducted in another school at a later point, this idea was vividly brought out. A sixth-grade language-arts teacher sat at her desk while children were doing seat work, and she would allow them to come to her with any questions. Several boys came to her desk with regularity. These boys were also the best students, and therefore she spent considerable time clarifying the assignments. In an informal discussion outside school, however, the boys gave a very different version of their purpose for seeking help. It seems that the teacher, who was extremely attractive, was also quite buxom and did not always wear a bra. The boys found that by going to her desk they could look over her shoulder and down the front of her blouse. It is doubtful that in their pubescent fervor they gained much from their discussion with her. In fact, their difficult task was to think of questions.

Children are thinking human beings at differing stages of learning impression management. Even though they may appear to teachers to be attentive and on task, some students may be actively engaged in disruptive behaviors. These disruptions may take a subtle and nonverbal form (meeting in the restroom or looking down a blouse), but nevertheless are strong statements about the active involvement of children in the world of school.

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